FINAL

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Annual Groundwater and Landfill Monitoring Report

2013 Long-Term Monitoring, Operable Unit A

Contract No. N44255-09-D-4005, LTM/O / Task Order 66

Former Naval Complex

Adak, Alaska

Department of the Navy
Naval Facilities Engineering Command Northwest
1101 Tautog Circle, Suite 203
Silverdale, WA 98315-1101

FINAL
ANNUAL GROUNDWATER AND LANDFILL MONITORING REPORT
2013 LONG-TERM MONITORING, OPERABLE UNIT A

FORMER NAVAL COMPLEX
ADAK, ALASKA

CONTRACT NUMBER: N44255-09-D-4005
LONG-TERM MONITORING/OPERATIONS TASK ORDER 66

SEALASKA ENVIRONMENTAL SERVICES, LLC
POULSBO, WASHINGTON

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Prepared by: Cara Alferness
Environmental Geologist

Reviewed by: Annette Franzen
Task Order Manager

EXECUTIVE SUMMARY

The groundwater and landfill monitoring at Operable Unit (OU) A of the Former Naval Complex, Adak, Alaska, was conducted in August and September 2013. The monitoring program for 2013 was implemented as described in the Comprehensive Monitoring Plan (CMP), Revision 5 (Navy 2012a); the 2013 updated CMP tables for Appendix A and B (Navy 2013a); and the Performance Work Statement and Performance Requirements Summaries in the base contract award (Contract N44255-09-D-4005), Attachment H. Sealaska Environmental Services, LLC conducted the 2013 monitoring activities from August 22 through September 18, 2013.

During the 2013 monitoring event, groundwater, surface water and sediment samples were collected from 110 monitoring locations at 19 sites. In addition, product thickness and depth-to-water measurements were performed at 162 locations from these sites. Monitoring was conducted to satisfy OU A Record of Decision (ROD; Navy, ADEC and EPA 2000) remedy requirements and post-free product recovery remedy requirements established under the State-Adak Environmental Restoration Agreement (Navy and ADEC 1994). Monitoring was conducted to assess the remedies of monitored natural attenuation, limited groundwater monitoring, surface water protection and compliance. Monitoring was also performed at two landfills to meet the objectives specified in the OU A ROD and the landfill closure plans.

Based on the previous monitoring results, the monitored natural attenuation remedies appear to be effective and biodegradation appears to be occurring to varying degrees at all of the monitored natural attenuation sites (Navy 2013b), and contaminant concentration data for 1999 through 2013 provide ample supporting evidence. Monitoring for natural attenuation parameters has been reduced from annually to every 5 years and was last conducted at 101 monitoring locations in 2009.

Comparisons to endpoint criteria stated in the CMP, Revision 5 (Navy 2012a) provide the basis for evaluating the effectiveness of the remedy and monitoring program at each site. The monitoring program is modified annually based on long-term monitoring observations and in response to changing site conditions. The endpoint criteria apply human health and ecological risk-based criteria and the Alaska Department of Environmental Conservation (ADEC) (18 Alaska Administrative Code 75.345) groundwater cleanup levels. At sites where groundwater is not considered as a drinking water source, 10 times the ADEC groundwater cleanup level is applied as endpoint criteria per decision documents.

Based on the 2013 monitoring program results, recommended changes in site-specific monitoring are presented below.

Area 303

For this site, the following changes to the monitoring program are recommended:

- Combine General Communications, Inc. (GCI) Compound site with Area 303 into one site: Area 303/GCI Compound, underground storage tank (UST) GCI-1. Sample for gasoline-range organics at wells 04-100, 04-202, 04-204, 04-210, 04-213 and 04-701, and monitor for free product at wells 04-201, 04-203 and 04-211.
- Monitor Solid Waste Management Unit (SWMU) 62, New Housing Fuel Leak Area, Sandy Cove Housing wells RW-102-4, 03-104, 03-778, MRP-MW2 and MRP-MW3 as part of Area 303 and not as part of SWMU 62. Add sampling for total and dissolved lead to MRP-MW3. Add total xylenes as a contaminant of concern for Area 303.
- Monitor SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing well 03-502 as part of Area 303 and not as part of SWMU 62. Add sampling for total and dissolved lead to well 03-502.
- For well MW-303-32, add sampling for toluene, ethylbenzene and total xylenes.
- For well MW-303-33, add sampling for diesel-range organics, toluene, ethylbenzene and total xylenes.

Former Power Plant, Building T-1451

For this site, no changes to the monitoring program are recommended.

GCI Compound, UST GCI-1

For this site, the following change to the monitoring program is recommended:

- Combine this site with Area 303 since it is wholly contained within Area 303.

Housing Area (Arctic Acres)

For this site, no changes to the monitoring program are recommended.

Naval Mobile Construction Battalion (NMCB) Building T-1416 Expanded Area

For this site, the following changes to the monitoring program are recommended:

- Discontinue sampling at wells 02-479 and 02-451.
- Discontinue sediment sampling at NL-05.

Resident Officer in Charge of Construction (ROICC) Contractor's Area, UST ROICC-7

For this site, no changes to the monitoring program are recommended.

Runway 5/23 Avgas Valve Pit

For this site, the following change to the monitoring program is recommended:

- Discontinue monitoring at this site since all endpoints have been reached, and request closure of the site from ADEC.

Source Area (SA) 79, Main Road Pipeline, South End and North End

For this site, no changes to the monitoring program are recommended.

SA 80, Steam Plant 4, USTs 27089 and 27090

For this site, no changes to the monitoring program are recommended.

South of Runway 18-36 Area

For this site, the following change to the monitoring program is recommended:

- Discontinue sampling for surface water at locations NSWSD-07 and NSWSD-08.
- Discontinue sampling for 2-methylnaphthalene and phenanthrene at sediment locations: NSWSD-2, NSWSD-4 and NSWSD-5.

SWMU 11, Palisades Landfill

For this site, the following change to the monitoring program is recommended:

- Discontinue sampling for SVOCs at the site.

SWMU 14, Old Pesticide Storage and Disposal Area

For this site, the following change to the monitoring program is recommended:

- Discontinue monitoring at well 01-153.

SWMU 17, Power Plant No. 3 Area

For this site, the following change to the monitoring program is recommended:

- Discontinue monitoring of tetrachloroethylene, trichloroethylene, 1,1- dichloroethene (DCE), and trans-1,2-DCE in well 05-735.

SWMU 25, Roberts Landfill

For this site, the following change to the monitoring program is recommended:

- Reduce sampling for VOCs to once every five year period with sampling to occur in 2014, 2018 and 2025.
- Add the analysis of surface water at seep location NL-14 for total and dissolved metals and aluminum to the monitoring program to monitor seep conditions.

SWMU 55, Public Works Transportation Department Waste Storage Area

For this site, no changes to the monitoring program are recommended.

SWMU 60, Tank Farm A

For this site, the following change to the monitoring program is recommended:

- Discontinue monitoring at well MW-E006.
- For location 852, collect the surface water sample during an ebbing high tide so that it is within 10 feet of the corresponding sediment sample.

SWMU 61, Tank Farm B

For this site, no changes to the monitoring program are recommended.

SWMU 62, New Housing Fuel Leak Area

For this site, the following changes to the monitoring program are recommended:

- Monitor SWMU 62, New Housing Fuel Leak Area, Sandy Cove Housing wells RW-102-4, 03-104, 03-778, MRP-MW2 and MRP-MW3 as part of Area 303 and not as part of SWMU 62.
- Monitor SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing well 03-502 as part of Area 303 and not as part of SWMU 62.

Tanker Shed, UST 42494

For this site, no changes to the monitoring program are recommended.

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ACRONYMS AND ABBREVIATIONS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
avgas	aviation gasoline
bgs	below ground surface
bis(2-EH)PHT	bis(2-ethylhexyl)phthalate
BKG	background
BTEX	benzene, toluene, ethylbenzene and total xylenes
BTOC	below top of casing
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
C.I.	confidence interval
CMP	Comprehensive Monitoring Plan
°C	degrees Celsius
D-Sb	dissolved antimony
DCE	dichloroethene
DO	dissolved oxygen
DRMO	Defense Reutilization and Marketing Office
DRO	diesel-range organics
DS	duplicate sample result
EPA	U.S. Environmental Protection Agency
FFA	Federal Facilities Agreement
FP	free product
ft	feet
GCI	General Communications, Inc.
GRO	gasoline-range organics
GW	groundwater

ACRONYMS AND ABBREVIATIONS (continued)

IC	institutional control
ICMP	Institutional Control Management Plan
IDW	investigation-derived waste
IRA	interim remedial action
JP-5	jet fuel no. 5
kg/m^3	kilograms per cubic meter
LGM	limited groundwater monitoring
LTM	long-term monitoring
µg/L	micrograms per liter
MeCl2	methylene chloride
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MLLW	mean lower low water
MNA	monitored natural attenuation
mS/cm	milliSiemens per centimeter
MS/MSD	matrix spike/matrix spike duplicate
mV	millivolts
NA	not applicable or not available
NAP	natural attenuation parameter
NAVFAC	Naval Facilities Engineering Command
Navy	U.S. Navy
NC	not calculated or not collected
NIRIS	Naval Installation Restoration Information Solution
NMCB	Naval Mobile Construction Battalion
NORPAC	North Pacific
NP	not planned
NR	natural recovery
NS	not sampled

ACRONYMS AND ABBREVIATIONS (continued)

NTU	nephelometric turbidity units
ORP	oxidation-reduction potential
OSWER	Office of Solid Waste and Emergency Response
OU	operable unit
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PR	percent recovery
PSE-2	Preliminary Source Evaluation 2
QA	quality assurance
QC	quality control
RAO	remedial action objective
RBSC	risk-based screening concentration
ROD	Record of Decision
ROICC	Resident Officer in Charge of Construction
RPD	relative percent difference
RRO	residual-range organics
S	Mann-Kendall statistic; the number of positive differences minus negative differences between sequential sampling results
SA	source area
SD	sediment
Sealaska	Sealaska Environmental Services, LLC
SIM	selected ion monitoring
SOP	standard operating procedure
SSR	spike sample result
SU	standard unit
SVOCs	semivolatile organic compounds
SW	surface water

ACRONYMS AND ABBREVIATIONS (continued)

SWMU	solid waste management unit
SWP	surface water protection
T	trace
TAC	The Aleut Corporation
TAH	total aromatic hydrocarbons
TAqH	total aqueous hydrocarbons
TCE	trichloroethylene
T/D-Mn	total and dissolved manganese
T/D-Pb	total and dissolved lead
TEX	toluene, ethylbenzene and xylenes
T-Pb	total lead
TSS	total suspended solids
T-Tl	total thallium
URS	URS Group, Inc.
USGS	United States Geological Survey
UST	underground storage tank
VC	vinyl chloride
VOC	volatile organic compound
WQP	water quality parameters

DATA QUALIFIER DEFINITIONS

D	The reported result is from a dilution.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
J	The reported result is an estimated concentration.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
U	Analyte was not detected. Reported value is the quantitation limit.
UJ	Analyte was not detected. Reported value is the quantitation limit, which is estimated.
X	The reported result may have a slight high bias due to the presence of non-target components.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

1 INTRODUCTION

The 2013 annual groundwater and landfill monitoring at the Former Naval Complex located on Adak Island in southwest Alaska (Figure 1-1) was conducted during the months of August and September. Sealaska Environmental Services, LLC (Sealaska) performed groundwater monitoring, surface water sampling, sediment sampling and inspection activities for Naval Facilities Engineering Command (NAVFAC) Northwest as part of the monitoring program for Operable Unit (OU) A. Groundwater, surface water and sediment samples were collected at 17 non-landfill Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), petroleum-release sites and two landfill sites in accordance with the Comprehensive Monitoring Plan (CMP), Revision 5 (Navy 2012a); the 2013 updated CMP tables for Appendix A and B (Navy 2013a); and Attachment H of the Performance Work Statement and Performance Requirements Summaries in the base contract award (Contract N44255-09-D-4005). This report presents the results of the 2013 long-term monitoring (LTM) field event.

1.1 PURPOSE OF MONITORING REPORT

The purpose of this annual groundwater and landfill monitoring report is to present the 2013 monitoring results for the petroleum-release sites, the non-landfill CERCLA sites and the CERCLA and State of Alaska Class I/II Municipal Solid Waste Landfills. This report summarizes the methods and results associated with sample collection, evaluates whether the remedies selected for the non-landfill CERCLA and petroleum-release sites to address the impacted groundwater have met the specified endpoint criteria and evaluates whether landfills are meeting post-closure care requirements.

1.2 OBJECTIVES OF MONITORING REPORT

This annual groundwater and landfill monitoring report has the following objectives:

- Summarize the 2013 annual groundwater, surface water and sediment monitoring and field sampling activities at landfill and non-landfill CERCLA and petroleum-release sites at the Former Naval Complex;
- Present results of monitoring well, surface water and sediment sample locations, and present results of shoreline inspections at landfill and non-landfill CERCLA and petroleum-release sites at the Former Naval Complex;

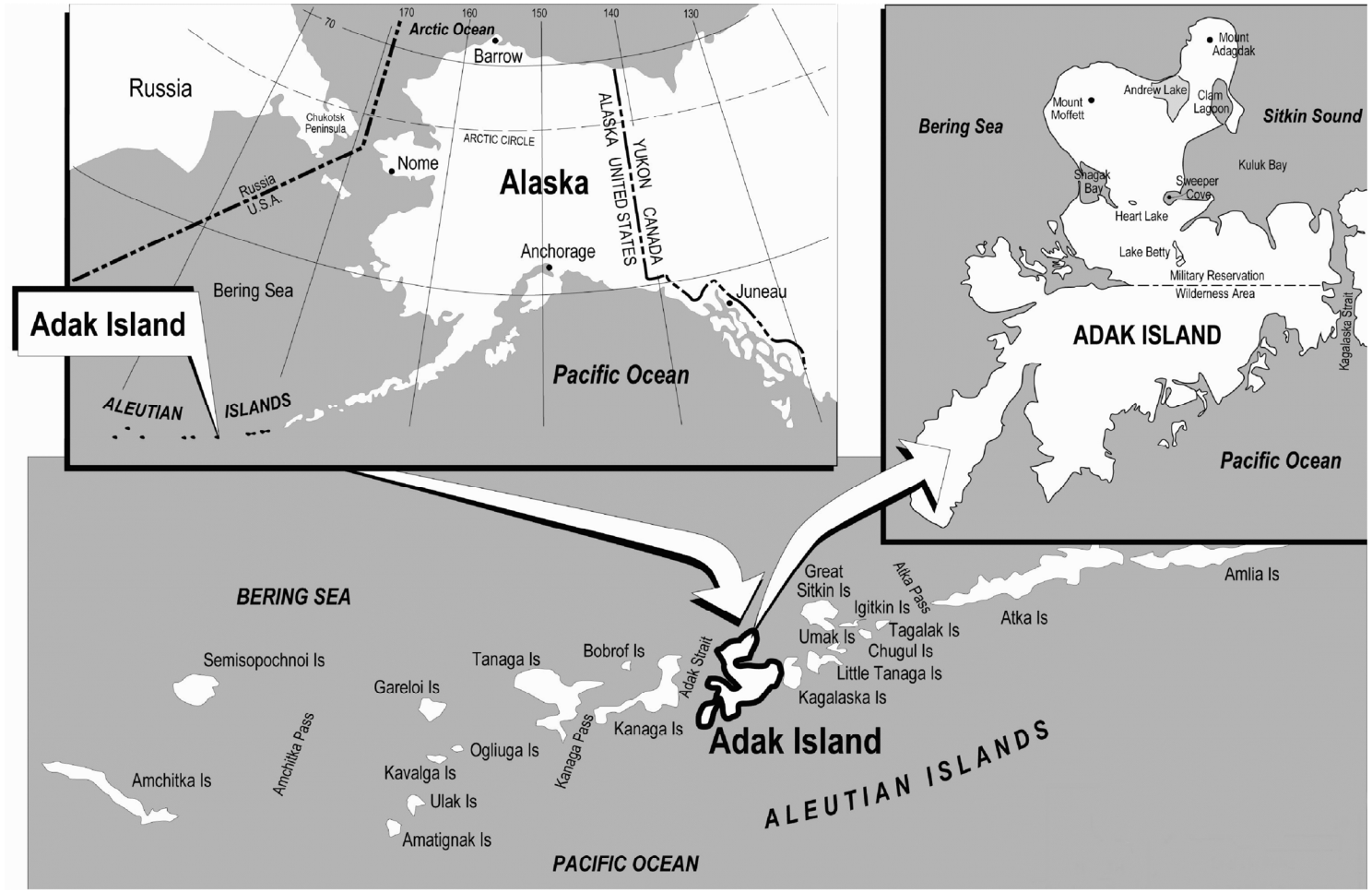
- Present site-specific results of chemical analyses conducted on groundwater, surface water and sediment samples collected during the annual monitoring;
- Identify locations where target analytes exceed endpoint criteria;
- Evaluate the available data and any existing historical data for trends in concentrations of target analytes;
- Summarize free product recovery conducted for LTM in 2013;
- Evaluate landfill monitoring data to ensure that the environmental cleanup remedies and the landfill closure actions remain compliant with the applicable laws and regulations and are protective of human health and the environment;
- Recommend modifications to sample collection activities for subsequent monitoring events in response to changing site conditions;
- Collect data to support the 5-year review estimate of time required to reach endpoint criteria for those locations with a statistically significant downward trend for target analyte results; and
- Present site-specific recommendations to reduce monitoring frequency, terminate monitoring or adjust monitoring, if appropriate.

1.3 REPORT ORGANIZATION

This annual groundwater and landfill monitoring report includes the following sections:

- Section 1 introduces the report and includes purpose and monitoring objectives.
- Section 2 presents a discussion of the LTM history and current LTM program.
- Section 3 presents monitoring endpoint criteria.
- Section 4 presents a summary of field activities associated with the groundwater, surface water and sediment monitoring performed during 2013 at the landfill sites, petroleum-release sites and selected non-landfill CERCLA sites on the Former Naval Complex.
- Section 5 presents a summary of deviations from the CMP, Revision 5 (Navy 2012a).
- Section 6 presents the assessment of quantity and quality of the analytical results obtained from the 2013 monitoring, and evaluates the usability of the data for the intended purpose.

- Sections 7 through 25 present, on a site-specific basis, the resulting data obtained during 2013 monitoring activities; a statistical review of the current and historical data with respect to trend determination and slope forecasting; a discussion of how analytical data compare with endpoint criteria; conclusions derived from natural attenuation monitoring; and recommendations for further monitoring activities based on groundwater monitoring results.
- Section 26 contains references used in the development of this report.
- The appendices include the following additional documentation:
    - Appendix A, Field Forms and Logbook
    - Appendix B, Sampling Deviation Forms
    - Appendix C, Data Summary Tables – through 2013
    - Appendix D, Summary of 2013 and Historical Depth-to-Water Measurements and Landfill Sites Field Parameters
    - Appendix E, 2013 Well Maintenance and Repair List
    - Appendix F, 2013 Data Validation Reports and Laboratory Analytical Data
    - Appendix G, Data Quality Assessment Summaries
    - Appendix H, Statistical Calculations
    - Appendix I, Photographic Log
    - Appendix J, Free Product Recovery Summary
    - Appendix K, Tide Charts
    - Apprndix L, Response to Regulator Comments



U.S. NAVY	SEALASKA	Not to Scale	**Figure 1-1** **Location Map, Adak Island, Alaska**	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

P:\SEALASKA\ADAK\TO 66\2013 GW \FIG 1-1.TIF
OCT 2, 2013

2 SITE DESCRIPTION AND ENVIRONMENTAL HISTORY

2.1 SITE DESCRIPTION

Adak Island is remotely located in the Aleutian Island chain in the Bering Sea, approximately 1,500 miles southwest of Anchorage, Alaska (Figure 1-1). Adak is surrounded by other islands, most notably Great Sitkin Island on the east and the volcanically active Kasatochi, 40 miles to the northeast. Adak Island is mountainous with rugged terrain and is approximately 15 miles in length. Because Adak typically experiences severe weather (cold and high winds), the island is naturally treeless and is covered by tundra typified by waist-high, hardy grass, lupin, fireweed and cow parsnips.

The City of Adak is located on the northern half of the island and includes a commercial airfield and airport, school, health clinic, general store and bar. In 2013, approximately 100 residents lived on the island full- or part-time. The main commercial industry is fishing and fish processing, followed by tourism. Numerous structures remain on the island that were built to support the former naval complex and which are now owned by The Aleut Corporation (TAC). Some structures are still being used, but many are abandoned, dilapidated and continue to deteriorate each year. Resources on the island are limited and expensive. Typical access to the island is by commercial air service, which is offered twice a week by Alaska Airlines. A health clinic provides limited medical services, and emergency air-lift medical services are available from Anchorage.

Adak Island was first used by military forces of the United States in 1942. Various branches of the military used the island beginning in 1942, and in 1950 the facility became a naval complex. Military use of the island has resulted in environmental impacts to soil and groundwater by several chemicals and products, including petroleum hydrocarbon compounds. A number of environmental restoration programs were initiated as early as 1986 to address these issues, and this monitoring program is part of the remedies implemented under the OU A Record of Decision (ROD; Navy, ADEC and EPA 2000).

2.2 LONG-TERM MONITORING PROGRAM

2.2.1 Petroleum-Release and Non-Landfill CERCLA Sites

The monitoring program reported herein addresses historical and ongoing monitoring requirements for 25 petroleum-release and non-landfill CERCLA sites. Since long-term monitoring commenced in 2003, eight of the 25 sites have met endpoint criteria and have received conditional closure or closure is pending. In addition, monitoring at many wells has been discontinued or reduced to biennial sampling because endpoints have been met or contaminant concentrations have exhibited decreasing trends. One new site, Area 303, was added to the LTM program in 2013 per the Final Technical Memorandum, Proposed Long-Term Monitoring Program for Area 303 (Navy 2012b) and the CMP, Revision 5. Table 2-1 lists the monitoring history for the 25 petroleum-release and non-landfill CERCLA sites since 2003 and changes to the sampling protocols as endpoints were met or site conditions were changed.

CERCLA sites not associated with landfills and which are included in this report are:

- Solid Waste Management Unit (SWMU) 14, Old Pesticide Disposal Area
- SWMU 17, Power Plant No. 3 Area
- SWMU 55, Public Works Transportation Department Waste Storage Area

All of the selected remedies described for the non-landfill CERCLA sites in the OU A ROD include institutional controls (ICs). An Institutional Control Management Plan (ICMP) consistent with the OU A ROD was prepared by the U.S. Navy (Navy), and approved by the U.S. Environmental Protection Agency (EPA) and Alaska Department of Environmental Conservation (ADEC) in 2000. The ICMP was updated by the Navy in 2013 and is included in the CMP, Revision 5 (Navy 2012a). IC inspections occurred concurrently with LTM field activities in 2013 and results of the inspections are presented in the IC Inspection Report (Navy 2013e).

2.2.2 Landfill Sites

The OU A ROD identified seven landfills requiring further action:

- SWMU 2, Causeway Landfill
- SWMU 4, South Davis Road Landfill
- SWMU 11, Palisades Landfill

- SWMU 13, Metals Landfill
- SWMUs 18/19, White Alice Landfill
- SWMU 25, Roberts Landfill
- SWMU 29, Finger Bay Landfill

Of these seven landfills, environmental media sampling is required at only four (Palisades, Metals, White Alice and Roberts). Monitoring at White Alice and Metals Landfills are required every 5 years only; these landfills are scheduled to be sampled in 2014 and again in 2018 to support the 5-year reviews (Table 2-6). Therefore, only two landfills are addressed in this report (Palisades and Roberts). The remaining three landfills (Causeway, South Davis Road and Finger Bay) are inspected annually for compliance with ICs and are reported separately as per the CMP, Revision 5 (Navy 2012a).

All four landfills (Palisades, Roberts, White Alice and Metals) are regulated by the EPA under the CERCLA and have undergone remedial actions in accordance with the OU A ROD (Navy, ADEC and EPA 2000). Roberts and White Alice Landfills were also operated as Class I/II Municipal Solid Waste Landfills under the State of Alaska's solid waste disposal regulations (18 Alaska Administrative Code [AAC] 60), and all four landfills have been closed under these regulations. All four landfills are also in the post-closure care period. As part of the post-closure care, monitoring of groundwater, sediment and surface water is required in accordance with the CMP, Revision 5 (Navy 2012a). The monitoring program was developed to meet the objectives specified in the OU A ROD and the landfill closure plans. The locations of the four landfills at which monitoring is still required are presented on Figure 2-2.

Historical changes to the landfill monitoring program are summarized in Table 2-2. Table 2-3 summarizes the current frequency of sampling by medium and by analyte for each of the four landfills per the CMP, Revision 5 (Navy 2012a). Changes made to the monitoring program were based on the recommendations presented in the 2010 Landfill Monitoring Report (Navy 2011a) and 2011 Landfill Monitoring Report (Navy 2012c). Sampling was not conducted at any landfill in 2012. Changes to the monitoring program that were implemented in 2013 since the last sampling event in 2011 are summarized below:

- SWMU 11, Palisades Landfill
    - Reduce sampling frequency to every other year.

- SWMU 13, Metals Landfill
  - Reduce monitoring at the site to once every 5 year period.
- SWMU 25, Roberts Landfill
  - Reduce sampling frequency to every other year.
  - Collect surface water again at new seep location NL-14 in 2013 and analyze for total and dissolved metals, aluminum and water quality parameters (WQPs).
- SWMUs 18/19, White Alice Landfill
  - Reduce monitoring at the site to once every 5 year period.

2.3 MONITORING PERFORMED IN 2013

2.3.1 Petroleum-Release and Non-Landfill CERCLA Sites

Table 2-4 summarizes the 2013 LTM petroleum-release and non-landfill CERCLA sites with their current remedies that have not yet received closure or are scheduled to be monitored biennially only. Table 2-4 also identifies the petroleum sites with no unacceptable risks for which groundwater is not considered a drinking water source. Endpoint criteria for this category are established at 10 times the ADEC cleanup levels (see Section 3 for a more in-depth discussion of endpoint criteria). Figure 2-1 shows the locations for all sites monitored in 2013.

Table 2-5 summarizes interim and current remedies and the monitoring purpose for each sampling location for the 2013 sampling event. The types of monitoring implemented at the OU A sites in 2013 include:

- Monitored natural attenuation (MNA)
- Free product recovery
- Compliance monitoring
- Natural recovery (for surface water bodies)
- Surface water protection monitoring

The purpose of the MNA, free product recovery, compliance monitoring and natural recovery is to determine whether the selected remedy is effective and endpoint criteria have been met. The purpose for surface water protection monitoring is to detect migration of petroleum hydrocarbons into unaffected areas and to verify that petroleum-related chemicals are not migrating toward downgradient surface water bodies (i.e., Sweeper Cove, Sweeper Creek, Kuluk Bay and Clam Lagoon).

2.3.2 Landfill Sites

The landfill sampling program performed during the 2013 annual monitoring event is summarized in Table 2-2. Figure 2-1 shows the locations for all landfill sites monitored in 2013. The scope of the 2013 landfill monitoring activities was to collect samples at Palisades Landfill (sediment) and Roberts Landfill (surface water and groundwater); to inspect wells, collect depths-to-groundwater and monitor methane in wells at Roberts Landfill; and to summarize the analytical results for the collected samples as required in the CMP, Revision 5 (Navy 2012a). For all media, sampling locations were selected to provide representative coverage of landfill conditions, with an emphasis on sample collection in areas immediately downgradient of the landfills that could be impacted by releases from the landfills. Findings from this monitoring event will be used to determine if changes to the monitoring program are needed to continue to protect potential downgradient receptors and meet post-closure monitoring objectives.

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Antenna Field, USTs ANT-1, ANT-2, ANT-3 and ANT-4												
ANT-601	MNA	DRO RRO NAPs	DRO RRO NAPs	DRO	DRO	DRO NAPs	DRO NAPs	DRO NAPs	DRO	Site Closure	Site Closure	Site Closure
Area 303												
03-107	MNA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	GRO Benzene T/D-Pb NAPs
03-012	MNA/SWP	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH and TAqH) NAPs
04-211	MNA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	GRO NAPs
MRP-MW2	MNA	NS	NS	NS	Sampled as part of SWMU 62	Sampled as part of SWMU 62	Sampled as part of SWMU 62	Sampled as part of SWMU 62	Sampled as part of SWMU 62	Sampled as part of SWMU 62	Sampled as part of SWMU 62	DRO GRO BTEX T/D-Pb NAPs
MW-303-28	MNA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	GRO T/D-Pb NAPs
MW-303-30	MNA/FP	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	GRO BTEX T/D-Pb dibenz(a,h)anthracene NAPs
MW-303-31	MNA/FP	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	GRO BTEX T/D-Pb dibenz(a,h)anthracene NAPs
MW-303-32	MNA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	DRO GRO Benzene NAPs
MW-303-33	MNA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	GRO Benzene NAPs
MW-303-37	MNA/SWP	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH and TAqH) NAPs

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Area 303 (continued)												
MW-303-38	MNA/FP	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	GRO BTEX T/D-Pb dibenz(a,h)anthracene NAPs
MW-303-39	MNA/FP	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	GRO BTEX T/D-Pb dibenz(a,h)anthracene NAPs
MW-303-40	MNA/FP	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	GRO BTEX T/D-Pb dibenz(a,h)anthracene NAPs
MW-303-41	MNA/FP	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	GRO BTEX T/D-Pb dibenz(a,h)anthracene NAPs
MW-303-42	MNA	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	GRO Benzene NAPs
MW-303-43	MNA	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	GRO NAPs
MW-303-44	MNA	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	GRO NAPs
Former Power Plant, Building T-1451												
01-118	MNA	DRO RRO NAPs	DRO RRO NAPs	DRO RRO	DRO RRO	DRO RRO	DRO RRO	DRO NAPs	DRO	DRO	DRO	DRO NAPs
01-150	MNA	DRO RRO NAPs	DRO RRO NAPs	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO	DRO	DRO NAPs
01-151	MNA/SWP	DRO RRO NAPs	DRO RRO NAPs	DRO	DRO	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH TAqH) NAPs	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	Well removed	Well removed
E-701	MNA/BKG	DRO GRO BTEX NAPs	DRO GRO BTEX NAPs	NAPs	NAPs	NAPs	NAPs	NAPs (every 5 years)	NS	NS	NS	NAPs
MW-1451-1	MNA	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	DRO NAPs

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Former Power Plant, Building T-1451 (continued)												
MW-1451-2	MNA/SWP	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	DRO BTEX PAHs (for TAH and TAqH) NAPs
MW-1451-3	MNA/SWP	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	DRO BTEX PAHs (for TAH and TAqH) NAPs
MW-1451-4	MNA/SWP	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	DRO BTEX PAHs (for TAH and TAqH) NAPs
MW-1451-5	MNA	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	DRO NAPs
MW-1451-6	MNA	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	DRO NAPs
MW-1451-7	MNA	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	DRO NAPs
MW-1451-8	MNA	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	DRO NAPs
MW-1451-9	MNA	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	Non-Existent	DRO NAPs
NL08 (SW)	SWP	NS	NS	NS	NS	NS	NS	NS	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)
NL-08 (SD)	SWP	NS	NS	NS	NS	NS	NS	NS	DRO PAHs	DRO PAHs	DRO PAHs	DRO PAHs
GCI Compound, UST GCI-1												
04-100	MNA	DRO GRO BTEX NAPs	DRO GRO BTEX NAPs	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	GRO benzene NAPs	GRO benzene	GRO	DRO GRO	GRO
04-202	MNA	NS	NS	DRO GRO BTEX NAPs	GRO BTEX	GRO BTEX	GRO BTEX	GRO benzene NAPs	GRO benzene	GRO	DRO GRO	GRO
04-204	MNA	NS	NS	NS	DRO GRO BTEX	GRO BTEX	GRO BTEX	GRO benzene NAPs	DRO GRO	DRO GRO	DRO GRO	GRO
04-210	MNA	NS	NS	GRO BTEX NAPs	GRO BTEX	GRO BTEX	GRO BTEX	GRO benzene NAPs	GRO	GRO	DRO GRO	GRO

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
GCI Compound, UST GCI-1 (continued)												
04-213	MNA	NS	NS	NS	DRO GRO BTEX	GRO	GRO	GRO	GRO	GRO	DRO GRO	GRO
04-701	MNA	GRO BTEX NAPs	GRO BTEX NAPs	GRO BTEX NAPs	GRO BTEX	NS	GRO benzene (even years)	NAPs	GRO benzene	NS	GRO	GRO
MRP-MW9	MNA	NS	NS	NS	DRO GRO BTEX	Discontinued	Discontinued	Discontinued	Discontinued	DRO	Discontinued	Discontinued
Housing Area (Arctic Acres)												
03-416	MNA	DRO RRO NAPs	DRO RRO NAPs	NS	DRO (even years)	NS	DRO	NAPs	DRO	NS	NS	DRO
03-420	MNA	DRO RRO NAPs	DRO RRO NAPs	DRO	DRO	DRO	DRO	DRO (odd years) NAPs	NS	DRO	NS	DRO
03-421	MNA	NS	NS	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO (odd years)	NS	DRO
03-422	5-year review	NS	NS	NS	NS	NS	NS	NS	DRO	Discontinued	Discontinued	Discontinued
03-890	MNA	NS	NS	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO (odd years)	NS	DRO
AA-01	MNA	DRO RRO NAPs	DRO RRO NAPs	NS	DRO	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
AA-02	5-year review	NS	NS	NS	NS	NS	NS	NS	DRO	Discontinued	Discontinued	Discontinued
AA-06	5-year review	NS	NS	NS	NS	NS	NS	NS	DRO	Discontinued	Discontinued	Discontinued
NMCB Expanded Area												
02-451	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene (odd years)	NS	GRO
02-452	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	Discontinued
02-453	MNA/SWP	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	Discontinued
02-455	MNA/SWP	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	Discontinued

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
NMCB Expanded Area (continued)												
02-461	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	GRO
02-478	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	Discontinued
02-479	MNA/SWP	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene (odd years)	NS	GRO
02-489	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
02-813	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
02-817	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	Discontinued
02-818	MNA/SWP	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	GRO
E-201	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	GRO
NMCB-04	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	Discontinued
NMCB-05	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	Discontinued	Discontinued	Discontinued	Discontinued

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
NMCB Expanded Area (continued)												
NMCB-07	MNA/SWP	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	GRO
NMCB-08	MNA/SWP	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	Discontinued
NMCB-09	MNA/SWP	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene (odd years)	NS	GRO
NMCB-10	MNA/SWP	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	GRO
NMCB-11	MNA/SWP	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	GRO
NMCB-12	MNA/SWP	NS	NS	NS	DRO GRO T-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX	DRO GRO T/D-Pb BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	Discontinued
NL-05 (SD)	SWP	NS	NS	NS	NS	NS	NS	DRO GRO T/D-Pb BTEX	DRO GRO benzene	DRO GRO benzene	DRO GRO benzene	GRO
NORPAC Hill Seep Area												
04-145	LGM	NS	NS	DRO	DRO	DRO	Discontinued	Discontinued	Discontinued	Site Closure	Site Closure	Site Closure
04-146	SWP	NS	NS	DRO	DRO	DRO	DRO	DRO	DRO			
04-147	SWP	NS	NS	DRO	DRO	DRO	DRO (even years)	NS	DRO			
04-403	LGM	NS	NS	DRO	DRO	DRO	DRO (even years)	NS	DRO			
04-405	LGM	NS	NS	DRO	DRO	DRO	DRO (even years)	NS	DRO			
NS-2	LGM	NS	NS	DRO	DRO	DRO	Discontinued	Discontinued	Discontinued			
NL-06 (SW)	SWP	NS	NS	NS	NS	NS	NS	NS	DRO			

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ROICC Contractor's Area, UST ROICC-7												
08-175	MNA	GRO BTEX NAPs	GRO BTEX NAPs	NS	BTEX	GRO	benzene (even years)	NAPs	benzene	NS	benzene	Discontinued
08-200	MNA	GRO BTEX NAPs	GRO BTEX NAPs	GRO BTEX	GRO BTEX	GRO BTEX	benzene	benzene NAPs	benzene (even years)	NS	benzene	benzene
08-202	MNA	GRO BTEX NAPs	GRO BTEX NAPs	GRO BTEX	GRO BTEX	GRO BTEX	benzene	benzene NAPs	benzene (even years)	NS	benzene	benzene
Runway 5-23 Avgas Valve Pit												
14-100	MNA	GRO GRO fractions BTEX NAPs	GRO GRO fractions BTEX NAPs	GRO BTEX	GRO BTEX (even years)	GRO	GRO BTEX	GRO NAPs	GRO (even years)	NS	GRO	GRO
14-110	MNA	GRO GRO fractions BTEX NAPs	GRO GRO fractions BTEX NAPs	GRO BTEX	BTEX	GRO	GRO (even years)	NAPs	GRO	NS	GRO	Discontinued
SA 78, Old Transportation Building, USTs 10583 and 10584 and ASTs												
12-145	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO benzene (even years)	NS	DRO GRO benzene	
12-152	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO	DRO GRO	Discontinued	Discontinued	Discontinued	Discontinued	
MW-116	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	NS	DRO GRO BTEX NAPs	DRO (even years)	NS	DRO	
MW-117	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX (even years)	DRO GRO BTEX NAPs (5 years)	Discontinued	Discontinued	Discontinued	Site Closure
12-801	SWP	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX (even years)	NS	DRO GRO BTEX	NAPs	Discontinued	Discontinued	Discontinued	
12-802	SWP/BKG	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX NAPs	DRO GRO BTEX (even years) NAPs	NAPs	DRO GRO BTEX NAPs	NAPs	DRO GRO BTEX	NS	DRO GRO benzene	

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SA 79, Main Road Pipeline												
02-230	SWP/MNA	DRO GRO BTEX NAPs	DRO NAPs	DRO	DRO	DRO	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO	DRO	DRO	DRO
MRP-MW8	MNA	DRO GRO BTEX NAPs	DRO NAPs	DRO	DRO	DRO	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH) NAPs	DRO	DRO	DRO	DRO
601	MNA	NS	NS	NS	NS	NS	NS	NS	NS	DRO	DRO	DRO
602	MNA	NS	NS	NS	NS	NS	NS	NS	NS	DRO	Discontinued	Discontinued
NL-01	MNA/SWP	NS	NS	NS	NS	DRO	DRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
E-403	MNA	NS	NS	NS	NS	NS	DRO	DRO	Discontinued	Discontinued	Discontinued	Discontinued
SA 80, Steam Plant 4, USTs 27089 and 27090												
04-103	MNA	DRO NAPs	DRO NAPs	DRO	DRO (even years)	NS	DRO	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
04-158	MNA	NS	NS	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO	DRO	DRO
04-159	MNA	NS	NS	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO	DRO	DRO
04-173	MNA	NS	DRO GRO BTEX	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO	DRO	DRO
04-801	MNA	NS	NS	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO	DRO	Discontinued
SP4-3	MNA	DRO NAPs	DRO NAPs	DRO	DRO	DRO	DRO	NAPs	DRO (even years)	NS	DRO	DRO
SA 82, P-80/P-81 Buildings, UST 10587 and AST 10333												
12-170	LGM	NS	NS	DRO	DRO (even years)	NS	DRO	Site Closure	Site Closure	Site Closure	Site Closure	Site Closure
12-172	LGM	NS	NS	DRO	DRO (even years)	NS	DRO					
12-180	LGM	NS	NS	DRO	DRO	DRO	DRO					
12-194	LGM	NS	NS	NS	NS	NS	DRO					
12-401	SWP	DRO	DRO	DRO	DRO	Discontinued	Discontinued					

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SA 88, P-70 Energy Generator, UST 10578												
12-162	LGM	NS	DRO GRO BTEX	DRO	DRO	DRO	DRO	DRO	DRO			
12-163	LGM	NS	DRO GRO BTEX	DRO	DRO	DRO	DRO	DRO	DRO			
12-197	LGM	NS	NS	DRO	DRO	DRO	DRO	DRO	DRO			
12-198	LGM	NS	DRO GRO BTEX	DRO	DRO	DRO	DRO	DRO	DRO	Site Closure	Site Closure	Site Closure
12-252	LGM	NS	DRO GRO BTEX	DRO	DRO	DRO	DRO	DRO	DRO			
12-253	LGM	NS	NS	NS	NS	DRO	DRO	DRO	DRO			
12-701	SWP	DRO	DRO	DRO	DRO	DRO	DRO	DRO	Discontinued			
12-702	LGM	NS	NS	NS	NS	DRO	DRO	DRO	Discontinued			
South of Runway 18-36 Area												
02-231	MNA/SWP	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH) NAPs	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)
02-232	MNA /SWP	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX (even years) PAHs (for TAH and TAqH)	DRO GRO PAHs NAPs	DRO BTEX PAHs (for TAH and TAqH; even years)	DRO	BTEX PAHs (for TAH and TAqH)	BTEX PAHs (for TAH and TAqH)
18/36-05	MNA	NS	NS	NS	DRO	DRO (odd years)	NS	DRO NAPs	Discontinued	Discontinued	Discontinued	Discontinued
AS-1	MNA/SWP	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH) NAPs	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	BTEX PAHs (for TAH and TAqH)	BTEX PAHs (for TAH and TAqH)
E-206	MNA	NS	NS	NS	DRO	DRO	DRO	DRO NAPs	Discontinued	Discontinued	Discontinued	Discontinued

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
South of Runway 18-36 Area (continued)												
E-208	MNA /SWP	DRO	DRO	DRO	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH; odd years)	NS	DRO (odd years) NAPs	NS	DRO	Discontinued	Discontinued
E-218	MNA /SWP	DRO	DRO	DRO	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX (even years) PAHs (for TAH and TAqH)	DRO GRO PAHs NAPs	DRO BTEX PAHs (for TAH and TAqH; even years)	DRO	Discontinued	Discontinued
MRP-12	MNA /SWP	DRO	DRO	DRO	DRO	DRO (odd years)	NS	DRO NAPs	Discontinued	Discontinued	Discontinued	Discontinued
RW-18/36-03	MNA /SWP	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH) NAPs	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued
NSWSD-1 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH) NAPs	DRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued	Discontinued
NSWSD-2 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued	Discontinued
NSWSD-3 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued	Discontinued
NSWSD-4 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued	Discontinued

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
South of Runway 18-36 Area (continued)												
NSWSD-5 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued	Discontinued
NSWSD-6 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued	Discontinued
NSWSD-7 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)
NSWSD-8 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)
NL-02 (SW)	SWP	NS	NS	NS	NS	TSS DRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
NSWSD-1 (SD)	NR	NS	NS	NS	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO PAHs	Discontinued	Discontinued	Discontinued
NSWSD-2 (SD)	NR	NS	NS	NS	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO PAHs	DRO PAHs	DRO PAHs	DRO PAHs
NSWSD-3 (SD)	NR	NS	NS	NS	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO PAHs	Discontinued	Discontinued	Discontinued
NSWSD-4 (SD)	NR	NS	NS	NS	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO PAHs	DRO PAHs	DRO PAHs	DRO PAHs
NSWSD-5 (SD)	NR	NS	NS	NS	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO PAHs	DRO PAHs	DRO PAHs	DRO PAHs
NSWSD-6 (SD)	NR	NS	NS	NS	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO PAHs	Discontinued	Discontinued	Discontinued

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
South of Runway 18-36 Area (continued)												
NSWSD-7 (SD)	NR	NS	NS	NS	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO PAHs	Discontinued	Discontinued	Discontinued
NSWSD-8 (SD)	NR	NS	NS	NS	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO PAHs	Discontinued	Discontinued	Discontinued
SWMU 14, Old Pesticide Storage and Disposal Area												
01-153	MNA	DRO GRO GRO fractions BTEX NAPs	DRO GRO GRO fractions BTEX NAPs	GRO BTEX	DRO (even years) GRO BTEX	NS	DRO GRO BTEX	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
	Compliance	T/D-Pb T-Tl TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	T/D-Pb T-Tl TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	T/D-Pb TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	T/D-Pb TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	T/D-Pb TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	T/D-Pb TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	T/D-Pb TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC NAPs	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2- DCE VC (even years)	NS	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC
MW-14-5	MNA	DRO GRO GRO fractions BTEX T/D-Pb NAPs	DRO GRO GRO fractions BTEX T/D-Pb NAPs	DRO GRO BTEX T/D-Pb	DRO GRO BTEX T/D-Pb	DRO GRO T/D-Pb	DRO GRO T/D-Pb	DRO GRO T/D-Pb NAPs	DRO GRO T/D-Pb (even years)	DRO GRO	DRO GRO	DRO GRO T/D-Pb
	Compliance	T-Tl TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	T-Tl TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	MeCl2	NS	NS	NS	NS	NS	NS	NS
MW-15-3	5-year review	NS	NS	NS	NS	NS	NS	NS	DRO GRO T/D-Pb	Discontinued	Discontinued	Discontinued
55-145	5-year review	NS	NS	NS	NS	NS	NS	NS	DRO GRO T/D-Pb	Discontinued	Discontinued	Discontinued
55-146	MNA/SWP	NS	NS	NS	NS	NS	NS	DRO GRO T/D-Pb	DRO GRO T/D-Pb	Discontinued	Discontinued	Discontinued

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 15, Future Jobs/DRMO												
MW-15-3	MNA	DRO GRO GRO fractions BTEX NAPs	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Site Closure	Site Closure
	Compliance	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC NAPs	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2- DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC		
SWMU 17, Power Plant No. 3 Area												
05-375	SWP/MNA	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO	DRO NAPs	DRO (even years)	NS	DRO	Discontinued
05-735	Compliance	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2- DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC
HC-02	MNA	NS	NS	NS	NS	DRO	DRO	DRO NAPs	DRO	Discontinued	Discontinued	Discontinued
HC-03	MNA	NS	NS	NS	NS	DRO	DRO	DRO NAPs	DRO	Discontinued	Discontinued	Discontinued
PP-05	MNA	NS	NS	NS	NS	DRO	DRO	DRO NAPs	DRO (even years)	NS	DRO	Discontinued
R-1	MNA	DRO RRO TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	DRO RRO bis(2-EH)PHT	DRO RRO bis(2-EH)PHT	DRO	DRO	DRO (even years)	NAPs	DRO	NS	DRO	Discontinued
R-2	MNA	NS	NS	NS	NS	DRO	DRO (even years)	NAPs	DRO	Discontinued	Discontinued	Discontinued
R-5	MNA	NS	NS	NS	NS	DRO	DRO	DRO NAPs	DRO	Discontinued	Discontinued	Discontinued

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 17, Power Plant No. 3 Area (continued)												
R-6	MNA	DRO RRO TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	DRO RRO bis(2-EH)PHT	DRO RRO bis(2-EH)PHT	DRO	DRO	DRO	DRO NAPs	DRO	Discontinued	Discontinued	Discontinued
SWMU 55, Public Works Transportation Department Waste Storage Area												
55-145	Compliance	D-Sb TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2- DCE VC	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC (odd years)	NS	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC
55-146	Compliance	D-Sb TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC MeCl2 bis(2-EH)PHT	NS	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC (even years)	NS	TCE PCE 1,1-DCE cis-1,2-DCE trans-1,2-DCE VC	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
SWMU 58/SA 73, Heating Plant 6												
12-101	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Site Closure
12-105	MNA	NS	NS	NS	NS	NS	NS	DRO NAPs (replaces 12-110)	DRO	DRO	DRO	
12-110	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	Discontinued	Discontinued	Discontinued	Discontinued	
12-114	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX (even years)	NS	DRO GRO BTEX	NAPs	DRO	NS	DRO	
12-120	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 58/SA 73, Heating Plant 6 (continued)												
12-121	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO NAPs	DRO	DRO	DRO	Site Closure
12-203	MNA	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO NAPs	DRO	DRO	DRO	
12-601	SWP	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO	Discontinued	Discontinued	
12-604	SWP	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX (even years)	NS	DRO GRO BTEX	NS	DRO	Discontinued	Discontinued	
12-611	SWP	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO	DRO	Discontinued	
NL-07 (SW)	SWP	NS	NS	NS	NS	NS	NS	DRO	DRO	DRO	Discontinued	
NL-07 (SD)	SWP	NS	NS	NS	NS	NS	NS	DRO	DRO	DRO	Discontinued	
SWMU 60, Tank Farm A												
LC5A	MNA/SWP	DRO GRO BTEX NAPs	DRO NAPs	DRO	DRO	DRO BTEX PAHs (for TAH and TAqH)	DRO	DRO BTEX PAHs (for TAH and TAqH) NAPs	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	BTEX PAHs (for TAH and TAqH)	BTEX PAHs (for TAH and TAqH)
MW E006	MNA	DRO GRO BTEX NAPs	BTEX NAPs	BTEX	BTEX	BTEX	BTEX	BTEX NAPs	Benzene	Benzene	Benzene	Benzene
852 (SW)	NR/SWP	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)
852 (SD)	NR/SWP	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO GRO PAHs	DRO PAHs	DRO PAHs	DRO PAHs	DRO PAHs
650	MNA/SWP	NS	NS	NS	NS	NS	NS	NS	NS	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 60, Tank Farm A (continued)												
651	MNA/SWP	NS	NS	NS	NS	NS	NS	NS	NS	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)
652	MNA/SWP	NS	NS	NS	NS	NS	NS	NS	NS	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)
653	MNA/SWP	NS	NS	NS	NS	NS	NS	NS	NS	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)	DRO BTEX PAHs (for TAH and TAqH)
NL-03 (SW)	SWP	NS	NS	NS	DRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
NL-03 (SD)	SWP	NS	NS	NS	BTEX DRO	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
SWMU 61, Tank Farm B												
14-113	MNA /SWP	GRO BTEX NAPs	GRO BTEX NAPs	GRO BTEX	GRO BTEX PAHs (for TAH and TAqH)	GRO BTEX PAHs (for TAH and TAqH)	GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH) T/D-Mn NAPs	GRO BTEX PAHs (for TAH and TAqH)	GRO BTEX PAHs (for TAH and TAqH)	GRO BTEX PAHs (for TAH and TAqH)	GRO BTEX PAHs (for TAH and TAqH)
14-210	MNA/SWP	GRO BTEX NAPs	GRO BTEX NAPs	GRO BTEX	GRO BTEX	GRO BTEX	GRO BTEX	DRO GRO BTEX T/D-Mn NAPs	GRO BTEX	GRO BTEX	GRO BTEX	GRO BTEX
TFB-MW4B	MNA	GRO BTEX NAPs	GRO BTEX NAPs	GRO BTEX	GRO BTEX	GRO BTEX	GRO BTEX	DRO GRO BTEX T/D-Mn NAPs	GRO BTEX	GRO BTEX	GRO BTEX	GRO BTEX
NL-04 (SW)	SWP/NR	NS	NS	NS	GRO BTEX PAHs (for TAH and TAqH)	GRO BTEX PAHs (for TAH and TAqH)	GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	GRO BTEX PAHs (for TAH and TAqH)	GRO BTEX PAHs (for TAH and TAqH)

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 61, Tank Farm B (continued)												
NL-04 (SD)	SWP/NR	NS	NS	NS	GRO BTEX	GRO BTEX	GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	GRO BTEX	GRO BTEX
NL-D-04 (Down-gradient SW)	SWP/NR	NS	NS	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	GRO BTEX PAHs (for TAH and TAqH)	Discontinued
NL-D-04 (Down-gradient SD)	SWP/NR	NS	NS	NS	NS	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	GRO BTEX	Discontinued
NL-U-04 (Upgradient SW)	SWP/NR	NS	NS	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH and TAqH)	Discontinued	Discontinued	Discontinued	Discontinued
NL-U-04 (Upgradient SD)	SWP/NR	NS	NS	NS	NS	NS	NS	DRO GRO BTEX	Discontinued	Discontinued	Discontinued	Discontinued
SWMU 62, New Housing Fuel Leak, Sandy Cove												
03-104	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO
03-155	MNA	DRO GRO BTEX NAPs	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO
03-619	MNA	NS	NS	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO
03-697	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	Discontinued	Discontinued
03-778	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 62, New Housing Fuel Leak, Sandy Cove (continued)												
03-802	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO	DRO	Discontinued
03-808	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
03-895	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	Discontinued
HMW-102-6	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO	Discontinued	Discontinued
HMW-107-2	MNA	NS	NS	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO	Discontinued	Discontinued
HMW-139-3	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO	Discontinued	Discontinued
HMW-146-3	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	Discontinued
HMW-184-1	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
MRP-MW2	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX T/D Pb[1] NAPs[1]

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 62, New Housing Fuel Leak, Sandy Cove (continued)												
MRP-MW3	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX
HMW-102-8	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
MW-107-1	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO	DRO	DRO
MW-107-4	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
MW-134-3	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
MW-134-11	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO
MW-146-1	MNA	NS	NS	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO	DRO	DRO
MW-187-1	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO benzene	DRO
SWMU 62, New Housing Fuel Leak, Eagle Bay												
03-103	MNA	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX PAHs NAPs	Switched to MW-134-11	Switched to MW-134-11	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	Discontinued

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 62, New Housing Fuel Leak, Eagle Bay (continued)												
03-109	MNA/SWP	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	Discontinued
03-502	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	GRO
03-898	MNA/SWP	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	Discontinued
AMW-704	MNA/SWP	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO
MW-303-7	MNA	NS	NS	NS	NS	NS	NS	NS	NS	DRO GRO BTEX	DRO	DRO
HMW-303-12	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	Discontinued	Discontinued	Discontinued
MW-139-2	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
MW-303-14	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	Discontinued	Discontinued	Discontinued
RW-303-16	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO
RW-303-13	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO

Table 2-1. Monitoring History for Petroleum-Release and Non-Landfill CERCLA Sites from 2003 through 2013 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes										
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 62, New Housing Fuel Leak, Eagle Bay (continued)												
RW-303-14	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO	Discontinued
NL-09 (SW)	NS	NS	NS	NS	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)	DRO GRO BTEX PAHs (for TAH and TAqH)
NL-09 (SD)	NS	NS	NS	NS	NS	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs
Tanker Shed, UST 42494												
04-175	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO	DRO NAPs	DRO	DRO	DRO	DRO
04-290	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO	DRO
04-306	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO benzene	DRO GRO benzene	DRO GRO	DRO
04-601	MNA/SWP	DRO GRO BTEX NAPs	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO NAPs	DRO GRO benzene (even years)	DRO	DRO GRO	DRO
TS-01	SWP	DRO GRO BTEX NAPs	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX	DRO GRO (even years)	NS	DRO GRO	Discontinued	Discontinued	Discontinued
TS-05	SWP	NS	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO (even years)	NS	DRO GRO	Discontinued	Discontinued	Discontinued
Yakutat Hangar, UST 2039-A												
05-221	LGM	NS	NS	DRO	DRO	Site Closure	Site Closure	Site Closure	Site Closure	Site Closure	Site Closure	Site Closure
05-244	LGM	NS	NS	DRO	DRO							
05-250	LGM	NS	NS	DRO	DRO							
05-389	SWP	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO							
05-801	SWP	DRO GRO BTEX	DRO GRO BTEX	DRO	DRO							
MW-2	LGM	NS	NS	DRO	DRO							

Notes:
[1] Parameters collected for Area 303 assessment.

Table 2-2. Landfill Monitoring Sampling Schedule to Date

	Dates of Sampling[1]																										
Site Name	**March 1996**	**May 1996**	**June 1996**	**July 1996**	**Aug 1996**	**Sept 1996**	**Oct 1996**	**Nov 1996**	**Feb 1997**	**May 1997**	**Dec 1997**	**June 1998**	**Sept 1999**	**Nov 2000**	**Sept 2001**	**Oct 2002**	**Oct 2003**	**Sept 2004**	**Sept 2005**	**Sept 2006**	**Sept 2007**	**Sept 2008**	**Sept 2009**	**Sept 2010**	**Sept 2011**	**Sept 2012**	**Sept 2013**
Palisades Landfill	-	•	-	-	•	-	-	•	•	•	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	-[3]	•
Metals Landfill	-	-	-	•	-	-	-	•	-	•	•	•	•	•	•	•	•	•	•	•	-	•	-	•	-[2]	-[2]	-[2]
Roberts Landfill	•	-	•	-	-	•	•	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	-[3]	•
White Alice Landfill	•	-	•	-	-	•	•	-	-	-	•	•	•	•	•	•	•	•	-	•	-	•	-	•	-[2]	-[2]	-[2]

Notes:
[1] Sampling dates include only those dates on which groundwater, surface water or sediment samples were obtained.
[2] White Alice and Metals Landfills are scheduled to be sampled once per every 5 year period. Next scheduled sampling events are in 2014 and 2018.
[3] Palisades and Roberts are scheduled to be sampled every other year.
• Completed sampling event
- Sampling event not scheduled or performed

Table 2-3. Summary of Landfill Sampling Frequency by Medium and Analyte

Medium	Dissolved Metals	Total Metals	VOCs	SVOCs	PCBs	WQPs[1]
Palisades Landfill						
Sediment	NA	Biennially[2]	NA	Biennially	Biennially	NA
Metals Landfill						
Groundwater	Every 5 years[3]	Every 5 years[3]	NA	NA	NA	Every 5 years
Roberts Landfill						
Groundwater	Biennially[4]	Biennially[4]	Biennially	NA	NA	Biennially
Surface Water	Biennially[4]	Biennially[4]	Biennially	NA	NA	Biennially
White Alice Landfill						
Groundwater	Every 5 years[5]	Every 5 years[5]	NA	NA	NA	Every 5 years
Surface Water	Every 5 years[5]	Every 5 years[5]	NA	NA	NA	Every 5 years

Notes:
[1] Alkalinity, sulfate, total dissolved solids, ammonia, total Kjeldahl nitrogen and chemical oxygen demand
[2] Samples analyzed for target analytes only (antimony, arsenic and nickel).
[3] Samples analyzed for arsenic and barium only.
[4] Samples analyzed for aluminum plus priority pollutant metals.
[5] Samples analyzed for barium plus priority pollutant metals.

Table 2-4. Summary of Long-Term Petroleum-Release and Non-Landfill CERCLA Monitoring Sites and Remedies for 2013

Site Name	Monitored Natural Attenuation	Free Product Recovery	Natural Recovery (SW/SD Sampling)	CERCLA Compliance	Surface Water Protection	No Unacceptable Risk Site (10 times cleanup levels)
Downtown Area Sites						
Area 303	X	X			X	
Former Power Plant, Building T-1451	X		X		X	
GCI Compound	X					
Housing Area (Arctic Acres)	X					
NMCB Building Area, T-1416 Expanded Area	X				X	X
ROICC Contractor's Area, UST ROICC-7	X					
Runway 5-23 Avgas Valve Pit	X					
SA 79, Main Road Pipeline	X				X	
SA 80, Steam Plant 4	X					
South of Runway 18-36 Area	X		X		X	X
SWMU 14, Old Pesticide Disposal Area	X			X	X	
SWMU 17, Power Plant No. 3 Area				X	X	X
SWMU 55, Public Works Transportation Department Waste Storage Area				X		
SWMU 60, Tank Farm A	X		X		X	
SWMU 61, Tank Farm B	X		X		X	
SWMU 62, New Housing Fuel Leak	X	X	X		X	
Tanker Shed	X				X	

Table 2-5. Summary of ROD Remedy and Intended Long-Term Monitoring Purpose for 2013 Petroleum-Release and Non-Landfill CERCLA Sites

Site Name	Remedy (Interim and Final)	Location Cross-Reference	Intended Purpose of Monitoring
Area 303	Free product recovery; MNA	03-107	Natural attenuation
		03-012	Natural attenuation/Surface water protection
		04-211	Natural attenuation
		MRP-MW2	Natural attenuation
		MW-303-28	Natural attenuation
		MW-303-30	Natural attenuation/Free product recovery
		MW-303-31	MNA/FP
		MW-303-32	Natural attenuation
		MW-303-33	Natural attenuation
		MW-303-37	Natural attenuation/Surface water protection
		MW-303-38	Natural attenuation/Free product recovery
		MW-303-39	Natural attenuation/Free product recovery
		MW-303-40	Natural attenuation/Free product recovery
		MW-303-41	Natural attenuation/Free product recovery
		MW-303-42	Natural attenuation
		MW-303-43	Natural attenuation
		MW-303-44	Natural attenuation
Former Power Plant, Building T-1451	MNA	01-118	Natural attenuation
		01-150	Natural attenuation
		MW-1451-1	Natural attenuation
		MW-1451-2	Natural attenuation/Surface water protection
		MW-1451-3	Natural attenuation/Surface water protection
		MW-1451-4	Natural attenuation/Surface water protection
		MW-1451-5	Natural attenuation
		MW-1451-6	Natural attenuation
		MW-1451-7	Natural attenuation
		MW-1451-8	Natural attenuation
		MW-1451-8	Natural attenuation
		NL-08	Natural recovery/Surface water protection

Table 2-5. Summary of ROD Remedy and Intended Long-Term Monitoring Purpose for 2013 Petroleum-Release and Non-Landfill CERCLA Sites (continued)

Site Name	Remedy (Interim and Final)	Location Cross-Reference	Intended Purpose of Monitoring
GCI Compound, UST GC-1	Free product recovery; MNA selected as the post-free product recovery remedy	04-100	Natural attenuation
		04-202	Natural attenuation
		04-204	Natural attenuation
		04-210	Natural attenuation
		04-213	Natural attenuation
		04-701	Natural attenuation
Housing Area (Arctic Acres)	MNA	03-416	Natural attenuation
		03-420	Natural attenuation
		03-421	Natural attenuation
		03-890	Natural attenuation
NMCB Building T-1416	Free product recovery; MNA selected as the post-free product recovery remedy	02-451	Natural attenuation
		02-461	Natural attenuation
		02-479	Natural attenuation
		02-818	Natural attenuation/Surface water protection
		E-201	Natural attenuation
		NMCB-07	Natural attenuation/Surface water protection
		NMCB-09	Natural attenuation/Surface water protection
		NMCB-10	Natural attenuation/Surface water protection
		NMCB-11	Natural attenuation/Surface water protection
		NL-05	Surface water protection
ROICC Contractor's Area, UST-ROICC-7	Limited groundwater monitoring followed by MNA	08-200	Natural attenuation
		08-202	Natural attenuation
Runway 5-23 Avgas Valve Pit	MNA	14-100	Natural attenuation
SA 79, Main Road Pipeline, North End and South End	Limited groundwater monitoring followed by MNA	02-230	Natural attenuation/Surface water protection
		601	Natural attenuation
		MRP-MW8	Natural attenuation
SA 80, Steam Plant 4, USTs 27089 and 27090	Free product recovery; MNA selected as the post-free product recovery remedy	04-158	Natural attenuation
		04-159	Natural attenuation
		04-173	Natural attenuation
		SP4-3	Natural attenuation

Table 2-5. Summary of ROD Remedy and Intended Long-Term Monitoring Purpose for 2013 Petroleum-Release and Non-Landfill CERCLA Sites (continued)

Site Name	Remedy (Interim and Final)	Location Cross-Reference	Intended Purpose of Monitoring
South of Runway 18-36 Area	Free product recovery, natural recovery for surface water and sediment and MNA	02-231	Natural attenuation/Surface water protection
		02-232	Natural attenuation/Surface water protection
		AS-1	Natural attenuation/Surface water protection
		NSWSD-2	Natural recovery
		NSWSD-4	Natural recovery
		NSWSD-5	Natural recovery
		NSWSD-7	Natural recovery
		NSWSD-8	Natural recovery
SWMU 14, Old Pesticide Storage and Disposal Area	MNA and CERCLA compliance	MW-14-5	Natural attenuation
		01-153	Compliance
SWMU 17, Power Plant No. 3 Area	Free product recovery; MNA selected as the post-free product recovery remedy and CERCLA compliance	05-735	Compliance
SWMU 55, Public Works Transportation Department Waste Storage Area	CERCLA compliance		
SWMU 60, Tank Farm A	MNA	LC5A	Natural attenuation/Surface water protection
		MW-E006	Natural attenuation
		650	Natural attenuation/Surface water protection
		651	Natural attenuation/Surface water protection
		652	Natural attenuation/Surface water protection
		653	Natural attenuation/Surface water protection
		852	Natural recovery/Surface water protection
SWMU 61, Tank Farm B	MNA	14-113	Natural attenuation/Surface water protection
		14-210	Natural attenuation/Surface water protection
		TFB-MW4B	Natural attenuation
		NL-04	Surface water protection/Natural recovery

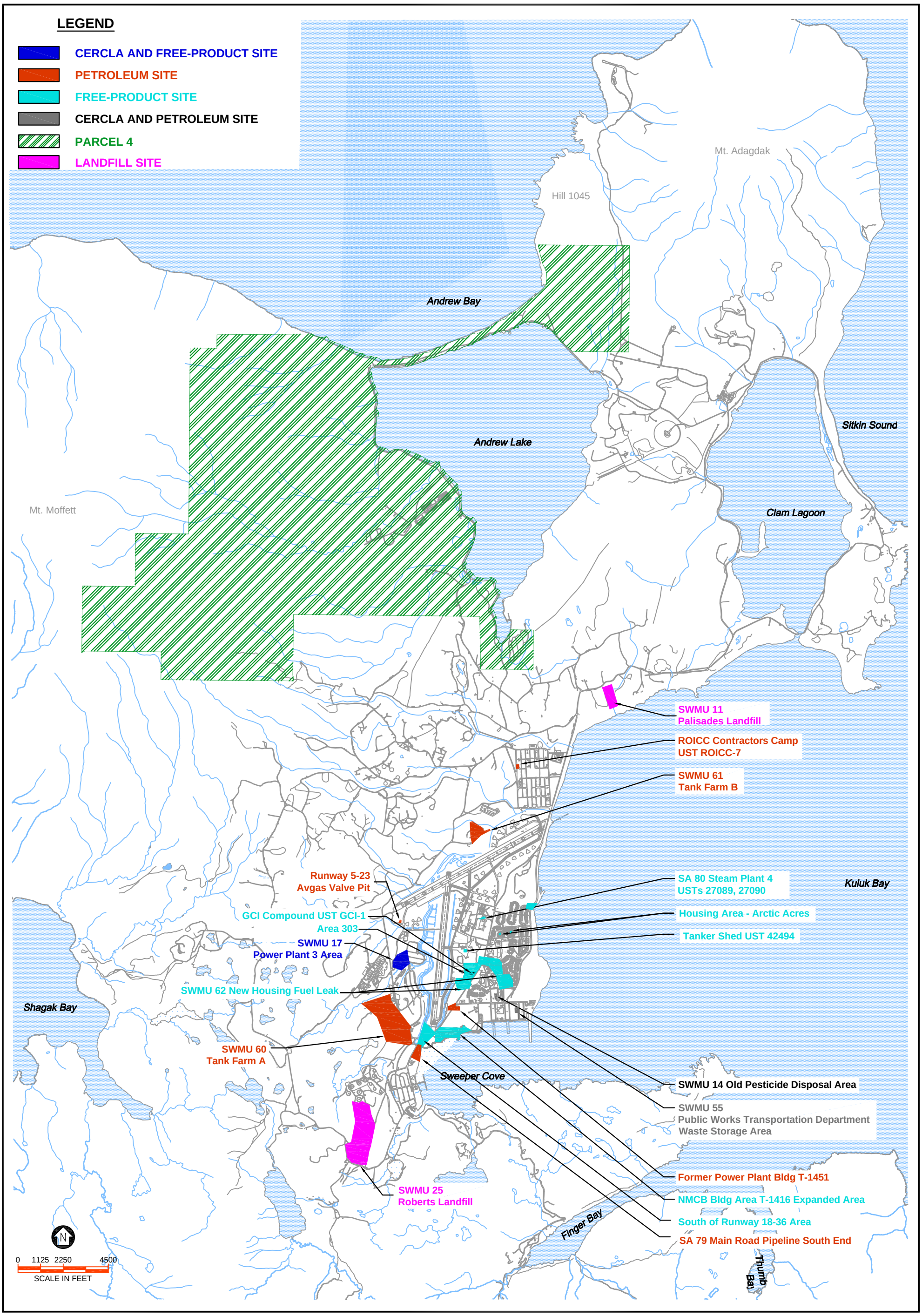
Table 2-5. Summary of ROD Remedy and Intended Long-Term Monitoring Purpose for 2013 Petroleum-Release and Non-Landfill CERCLA Sites (continued)

Site Name	Remedy (Interim and Final)	Location Cross-Reference	Intended Purpose of Monitoring
SWMU 62, New Housing Fuel Leak	Free product containment and passive recovery, surface soil excavation and MNA	**Sandy Cove Housing Complex**	
		03-104	Natural attenuation
		03-155	Natural attenuation
		03-619	Natural attenuation
		03-778	Natural attenuation
		MRP-MW2	Natural attenuation
		MRP-MW3	Natural attenuation
		MW-107-1	Natural attenuation
		MW-134-11	Natural attenuation
		MW-146-1	Natural attenuation
		MW-187-1	Natural attenuation
		Eagle Bay Housing Complex	
		03-502	Natural attenuation
		AMW-704	Natural attenuation/Surface water protection
		MW-303-7	Natural attenuation
		RW-303-13	Natural attenuation/Surface water protection
		RW-303-16	Natural attenuation/Surface water protection
		NL-09	Natural recovery/Surface water protection
Tanker Shed, UST 42494	Free product recovery; MNA selected as the post-free product recovery remedy	04-175	Natural attenuation
		04-290	Natural attenuation
		04-306	Natural attenuation
		04-601	Natural attenuation/Surface water protection

Table 2-6. Adak OU A and OU B-1 Long-Term Monitoring Program Schedule

	Groundwater Monitoring			Landfill Monitoring		Institutional Controls Inspections				
Year	**Annual Sites[1]**	**Biennial Sites**	**NAPs[2]**	**Biennial Sites[3]**	**5 Year Sites[4]**	**Annual [5]**	**Biennial Sites**	**5-Year IC and OU B-1 Sites**	**Marine Monitoring**	**5-Year Review**
2014	X	X	X	X	X	X		X		
2015	X					X	X		X	
2016	X	X		X		X				X
2017	X					X	X		X	
2018	X	X	X	X	X	X				
2019	X					X	X	X	X	
2020	X	X		X		X				
2021	X					X	X		X	X
2022	X	X		X		X				
2023	X					X	X		X	
2024	X	X	X	X	X	X		X		
2025	X					X	X		X	
2026	X	X		X		X				X

Notes:
[1] Area 303 and Former Power plant, Building T-1451 sites
[2] Natural attenuation parameters sampling conducted at all sites
[3] Palisades and Roberts landfills
[4] Metals and White Alice landfills and VOC sampling at Roberts Landfill
[5] Education program, excavation restrictions monitoring, Downtown Area groundwater use restriction monitoring
Gray – 5-year monitoring conducted on alternating 4- and 6-year intervals to coincide with biennial monitoring
Yellow – 5 year review



U.S.NAVY	SEALASKA	**Figure 2-1** **2013 Groundwater and Landfill Monitoring Sites on Adak Island**	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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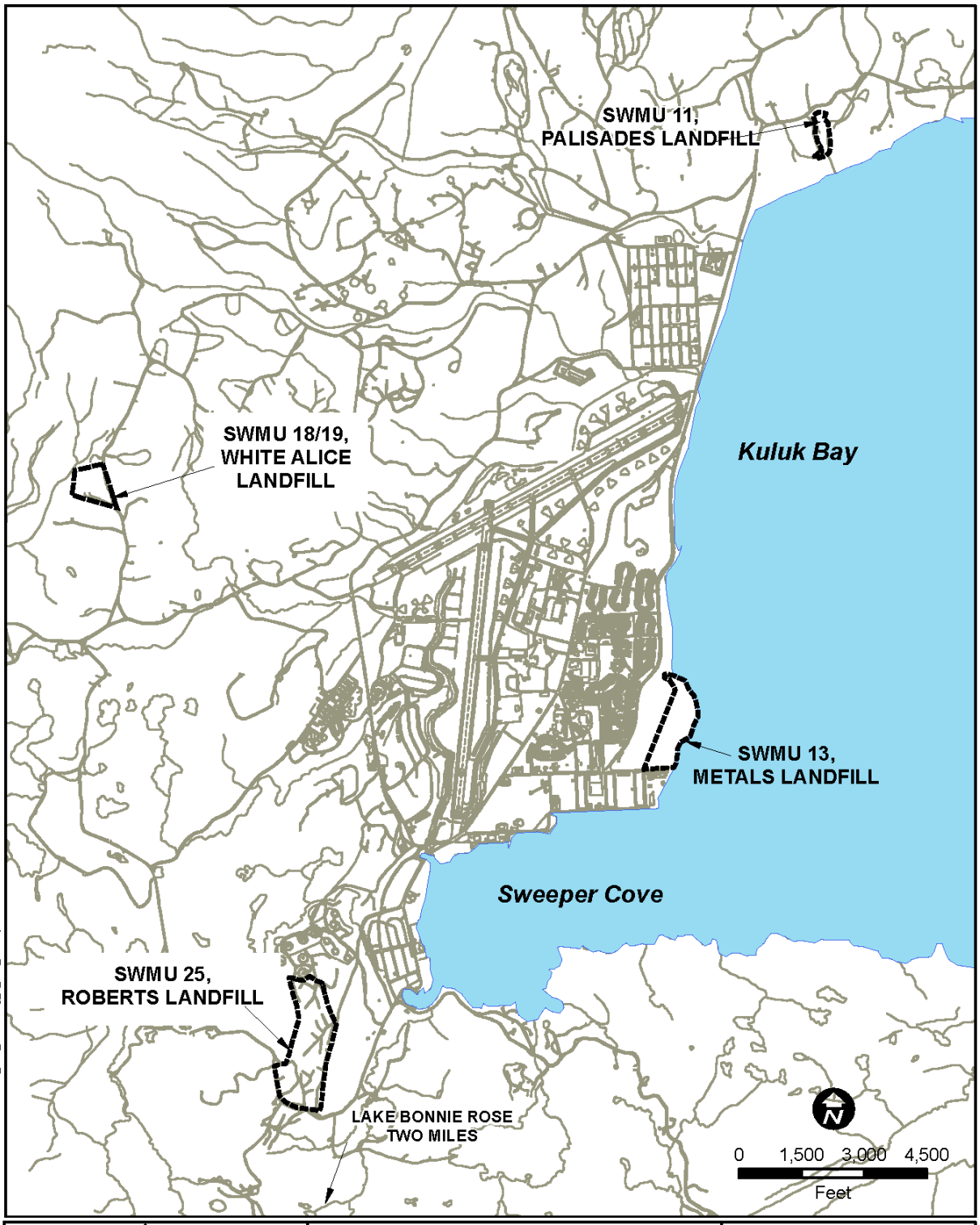

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U.S. NAVY	SEALASKA	Figure 2-2 Landfill Monitoring Sites	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

3 MONITORING TYPES AND ENDPOINTS

3.1 PETROLEUM-RELEASE AND NON-LANDFILL CERCLA SITES MONITORING

Monitoring endpoints are specified in the CMP, Revision 5 (Navy 2012a). Chemical-specific criteria are used as a means of quantitatively evaluating the progress of a remedy toward achieving the remedial action objectives (RAOs) stated in the OU A ROD. Therefore, environmental restoration requires regular monitoring of groundwater at petroleum and non-landfill CERCLA sites to assess concentrations and trends relative to monitoring endpoints. Endpoint criteria are represented by a set of chemical-specific conditions that indicate whether the RAO has been met and monitoring can be terminated. Whether endpoints are met is evaluated on a chemical-specific basis. Specific endpoint criteria are described herein by monitoring type.

3.1.1 Petroleum Monitoring

The following five separate conditions are possible regarding monitoring endpoints at petroleum sites:

- Conditions meet endpoint criteria, and monitoring may be reduced or terminated.
- Conditions meet endpoint criteria, and monitoring is continued due to other existing conditions at the site (e.g., contaminated upgradient wells).
- Conditions do not meet endpoint criteria, and monitoring will continue at the existing frequency.
- Conditions do not meet endpoint criteria, but conditions are such that monitoring frequency can be reduced.
- Conditions do not meet endpoint criteria, but conditions are such that the site remedy will be evaluated.

Target analytes for petroleum monitoring sites are specified in the OU A ROD, Section 10.3.2 to be site specific and not all ROD-listed target analytes are analyzed at every site (Navy, ADEC and EPA 2000). The site-specific analyses selected for the monitoring program of each site are based on historical results and the nature of the release. The following are the 2013 target analytes for petroleum monitoring sites:

- Gasoline-range organics (GRO)
- Benzene, toluene, ethylbenzene and total xylenes (BTEX)

- Diesel-range organics (DRO)
- Total and dissolved lead
- Dibenz(a,h)anthracene

3.1.2 Monitored Natural Attenuation Groundwater Sites

Natural attenuation monitoring is conducted at sites with the OU A ROD- and State-Adak Environmental Restoration Agreement (SAERA)-selected remedy of MNA. The LTM at MNA sites includes the following:

- Track contaminant concentrations in groundwater, surface water and sediment (depending on the site) over time at the monitored sites;
- Monitor remedy performance and compliance;
- Evaluate contaminant concentrations and trends in these media relative to monitoring endpoints; and
- Document the current status of each monitored site or monitoring location relative to the chemical- and media-specific endpoints and RAOs stated in the OU A ROD based on the evaluation of contaminant concentrations and trends by media relative to monitoring endpoints,

MNA has been selected as the final remedy for 15 sites. Monitoring is considered complete at a given location if chemical concentrations are below the primary endpoint criteria for two consecutive monitoring events, with the exception of sites Area 303, Naval Mobile Construction Battalion (NMCB), South of Runway 18-36 and SWMU 62, all of which require three consecutive monitoring events. Table 3-1 lists the groundwater chemical endpoint criteria for petroleum and non-landfill CERCLA sites.

Two petroleum sites were identified as having no unacceptable human health and ecological risks, and groundwater at those sites is not considered a current or potentially future drinking water source. Endpoint criteria for these sites are established at 10 times the groundwater chemical endpoint criteria and are identified in the list below. MNA sampling was conducted at the following sites during August and September 2013:

- Area 303
- Former Power Plant, Building T-1451
- General Communications, Inc. (GCI) Compound, Underground Storage Tank (UST) GC-1

- Housing Area (Arctic Acres)
- NMCB Building T-1416 (10 times cleanup levels)
- Resident Officer in Charge of Construction (ROICC) Contractor's Area, UST ROICC-7
- Runway 5-23 Avgas Valve Pit
- Source Area (SA) 79, Main Road Pipeline, South End
- SA 80, Steam Plant 4, USTs 27089 and 27090
- South of Runway 18-36 (10 times cleanup levels)
- SWMU 14, Old Pesticide Storage and Disposal Area
- SWMU 60, Tank Farm A
- SWMU 61, Tank Farm B
- SWMU 62, New Housing Fuel Leak
- Tanker Shed, UST 42494

Table 3-1. Petroleum and Non-Landfill CERCLA Site Monitoring Endpoints for Target Analytes in Groundwater

Target Analyte	Alaska Cleanup Levels 18 AAC 75.345 (µg/L)[1]
Volatile Organic Compounds	
1,1-Dichloroethene	7
Cis-1,2-dichloroethene	70
Trans-1,2-dichloroethene	100
Benzene	5
Ethylbenzene	700
Tetrachloroethylene	5
Toluene	1,000
Total xylenes	10,000
Trichloroethylene	5
Vinyl chloride	2
Semivolatile Organic Compounds	
Dibenz(a,h)anthracene	0.12
Petroleum Hydrocarbons	
Gasoline-range organics	2,200[2] (13,000[3])
Diesel-range organics	1,500
Metals	
Lead	15

Notes:
[1] Cleanup levels shown are applicable if groundwater is a source of drinking water at the site. A concentration equal to 10 times the concentration shown may be used if groundwater is not a current source of drinking water, or groundwater is not a reasonably expected future source of drinking water.
[2] Standard is based on estimated solubility.
[3] Cleanup level for GRO at a site for which groundwater is not expected to be a future source of drinking water (10 times cleanup level) is 13,000 µg/L,

Natural attenuation of petroleum hydrocarbons has been demonstrated on Adak Island. As a result, the CMP, Revision 5 (Navy 2012a) prescribed natural attenuation parameter (NAP) monitoring once every 5 years. This monitoring was conducted in 2009 at all MNA sites. NAPs monitoring was also conducted during the 2013 field event at two sites (Area 303 and Former Power Plant, Building T-1451) to evaluate if MNA is occurring in groundwater at monitoring wells newly installed during the summer of 2012 as part of the Navy's Petroleum Sites Remediation Program.

One of the stated objectives in the OU A ROD for these sites is to estimate the rate of natural attenuation to demonstrate achievement of the primary endpoint criteria within 75 years. As a secondary endpoint criteria, monitoring at a specific location could be substantially reduced if it can be demonstrated that:

- The concentrations are decreasing at a predictable rate with a degree of confidence of at least 80 percent; and
- The exceedance poses no reasonable threat to downgradient receptors.

If monitoring demonstrates that both of these secondary endpoint criteria are met, then it will be concluded that natural attenuation is progressing as predicted, groundwater in the area poses no threat to humans or the environment, and further monitoring can be substantially reduced (e.g., in frequency, location or analyte).

To determine whether secondary endpoint criteria are achieved, a trend evaluation was performed for well locations where exceedances of the primary endpoint criteria have occurred. As specified by the CMP, Revision 5 (Navy 2012a), trend evaluations were performed when at least four monitoring data points were available. Trend analyses were performed on concentrations of at least one analyte in a total of 37 wells at 13 sites during 2013.

Monitoring will be continued if the trend evaluation determines that the primary endpoint criteria are not met, as evidenced by:

- Decrease in concentrations over time, but non-demonstrability that the exceedances pose no reasonable threat to downgradient receptors; or
- No significant change in concentrations observed, and no trend line found outside the confidence interval (i.e., the concentration trend is uncertain).

If the data tests indicate that the concentrations are increasing, an evaluation will be performed to determine whether to continue monitoring or take additional action.

The effectiveness of the selected remedies will be evaluated during the 5-year reviews. NAP sampling will be conducted once every 5 year period to coincide with the 5-year reviews (see Table 2-6) and was last conducted during the 2009 field event (except for Area 303 and Former Power Plant as described above). The MNA remedy for these sites was evaluated during the 5-year review in 2011 to determine whether natural attenuation is still being demonstrated in groundwater. The 5-year review presents the results of monitoring conducted up to that time and identifies future actions as necessary. If the 5-year review demonstrates that MNA will not achieve the primary endpoint criteria within the 75-year time frame at a site, enhancement of MNA or the use of alternative remedial actions will be evaluated and discussed with ADEC.

Statistical Trend Analysis Methods

Before statistical trend analysis was performed, the applicable chemical data from the monitoring wells for the 1999 through 2013 period were compiled and reviewed for a qualitative assessment of the suitability, comparability and representativeness of the historical data (i.e., a historical data usability assessment). This time frame was selected because it would allow capture of 4 to 10 sampling periods (and meet the minimum number of four data points required for the Mann-Kendall test) and exhibit any long-term characteristics or trends in the data. Statistical trend analysis for the compounds of interest occurring in samples from the site monitoring wells was accomplished using the Mann-Kendall test, which is a non-parametric statistical test used to evaluate trends in data over time. It tests the null hypothesis (H0) at both the 80 and 95 percent confidence intervals. Trend analysis was performed for analytes in groundwater which exceeded endpoint criteria during the previous two sampling events. The analysis output indicates whether parameter trends are increasing, decreasing or exhibiting no trend. If no trend is indicated, a coefficient of variation assessment is made to evaluate parameter stability and determine whether concentrations are stable or unstable. Because the chemical data were collected in August and September of each year, no analysis of seasonal trend can be conducted, and the Mann-Kendall test rather than a Seasonal Kendall test is appropriate.

If a statistically significant decreasing trend was identified in the Mann-Kendall trend analysis, Sen's slope estimate was used to calculate the overall median slope. Sen's procedure is a non-parametric statistical test that calculates the true slope of a linear trend by evaluating the median slope for all the pairs of samples as an estimate of the overall slope. This methodology is less sensitive to outliers or missing data as compared to conventional linear regression techniques. To ensure the calculated confidence intervals were relevant,

Sen's evaluation was performed on data for which sampling events were not more than 2 years apart. One-half the detection limit was used if analytical results were not detected. Statistical calculations for each site are listed in Appendix H.

3.1.3 Surface Water Protection Groundwater Monitoring Endpoint

The OU A ROD (Navy, ADEC and EPA 2000, Section 10.3) specifies that groundwater monitoring will be conducted for CERCLA and petroleum-related chemicals at sites where concentrations in groundwater exceed water quality criteria and groundwater could discharge into a regulated surface water body. In general, surface water protection monitoring is being conducted at a limited number of wells positioned downgradient of free product sites between the source area and a surface water body. The purpose of surface water protection monitoring is to monitor for migration of free product or dissolved contaminants into an area that is currently not impacted and thus to provide an early warning of potential migration to the associated surface water body. The surface water bodies located downgradient of actively monitored sites include Sweeper Cove, North Sweeper Creek and South Sweeper Creek.

Because several petroleum release sites on Adak Island are located upgradient from these three water bodies, selected monitoring locations at these sites are designated for surface water protection monitoring. This monitoring was planned at the following 34 sampling locations during the 2013 monitoring event:

- Area 303, locations 03-012 and MW-303-37
- Former Power Plant, Building T-1451, locations MW-1451-2, MW-1451-3, MW-1451-4 and NL-08
- NMCB Building T-1416, locations 02-451, 02-479, 02-818, NMCB-07, NMCB-10, NMCB-11 and NL-05
- SA 79, Main Road Pipeline, South End, location 02-230
- South of Runway 18-36 Area, locations 02-231, 02-232, AS-1, NSWSD-2, NSWSD-4 and NSWSD-5
- SWMU 60, Tank Farm A, locations LC5A, 650, 651, 652, 653 and 852
- SWMU 61, Tank Farm B, locations 14-113, 14-210 and NL-04
- SWMU 62, New Housing Fuel Leak, locations AMW-704, RW-303-13, RW-303-16 and NL-09
- Tanker Shed, UST 42494, location 04-601

The chemical-specific criteria applicable to surface water are specified in the Alaska Water Quality Standards (18 Alaska Administrative Code [AAC] 70.020[b][5][A][iii]). For sites with BTEX and GRO as contaminants of concern, the criteria specify that total aqueous hydrocarbons (TAqH) (sum of BTEX and polycyclic aromatic hydrocarbon [PAH] concentrations) in the water column may not exceed 15 micrograms per liter (µg/L) and total aromatic hydrocarbons (TAH) (sum of BTEX concentrations) may not exceed 10 µg/L. The point of compliance for achieving these surface water criteria is established at the soil/surface water interface by ADEC (ADEC 2001).

The surface water protection monitoring regime uses analytical results for groundwater samples collected from wells adjacent to or upgradient from receiving surface water bodies. The evaluation compares analytical results for petroleum compounds to the Alaska Water Quality Standards (18 AAC 70; ADEC 2009). If this comparison indicates an exceedance and a significant increase in concentrations over three measurements at a surface water protection monitoring location, the following actions will be initiated:

- Evaluation of chemicals and their concentrations identified in surface water protection wells relative to the potential for a reasonable threat to downgradient aquatic receptors;
- Evaluation and planning for collection of one upgradient and one downgradient surface water sample at the soil/surface water interface closest to the subject sentinel well location;
- Review of the final remedy selected for the nearest upgradient site, and evaluation of the remedy performance relative to surface water protection criteria; and
- Initiation of free product recovery in surface water protection wells where the presence of free product is indicated by an interface probe.

The endpoint for surface water protection monitoring depends directly on the associated upgradient site achieving the remedial endpoint criteria. Once the upgradient site has achieved the remedial endpoint and it can be demonstrated that no reasonable threat to the downgradient receptor exists, surface water monitoring at the associated location will be terminated.

3.1.4 CERCLA Compliance Groundwater Monitoring

Compliance monitoring is conducted at sites where CERCLA-regulated chemicals have been identified as target analytes. The purpose of compliance monitoring is to evaluate whether target analyte concentrations in the groundwater comply with the endpoint criteria.

CERCLA groundwater monitoring was conducted at the following non-landfill sites during the 2013 monitoring event:

- SWMU 14, Old Pesticide Storage and Disposal Area; location 01-153
- SWMU 17, Power Plant No. 3 Area; location 05-735
- SWMU 55, Public Works Transportation Department Waste Storage Area; location 55-145

Target analytes for CERCLA groundwater monitoring include chlorinated volatile organic compounds (VOCs) and daughter products (see Tables 2-1 and 3-1). Compounds detected during each CERCLA monitoring event are evaluated for inclusion or removal as target analytes, based on a comparison to endpoint criteria. Revisions to the target analyte list and monitoring frequency are made in the negotiated recommendations in the annual groundwater monitoring reports, 5-year reviews and revisions to the CMP.

The groundwater monitoring program was expanded, on a site-specific basis, to include the monochlorinated and dichlorinated daughter product compounds of the target analytes specified in the OU A ROD. In general, remedy evaluations and trends are conducted using only those analytes specified in the OU A ROD. In some cases, however (e.g., SWMU 17), trend analysis also included additional chlorinated VOC daughter products.

Compliance monitoring will be considered complete at a given location if concentrations of the target analytes are below the endpoint criteria as specified by 18 AAC 75.345 (Table 3-1) for two consecutive sampling rounds. A secondary endpoint can be established based on the trend evaluation discussed in Section 3.1.1, if the following can be demonstrated (Navy, ADEC and EPA 2000):

- The concentrations are decreasing at a predictable rate with a degree of confidence of at least 80 percent; or
- The exceedance poses no reasonable threat to downgradient receptors.

Generally, if the trend evaluation does not indicate that an endpoint has been met, monitoring will continue as required. Additional data reviews will be performed after every fifth year until a monitoring endpoint is reached. If the analysis indicates that the concentration is increasing, the Navy, in consultation with ADEC and EPA, will determine the appropriate course of action. Trend evaluations for chlorinated VOCs are performed in the same manner as for petroleum compounds.

The results and analyses of the compliance monitoring are summarized annually. Discussion of the need for continued compliance monitoring and recommended changes to the compliance monitoring program (i.e., increase frequency, decrease frequency or discontinue) will be presented in the 5-year review document.

3.1.5 Natural Recovery/Sediment and Surface Water Monitoring

Based on the Final Decision Document South of Runway 18-36, August 2006, natural recovery with monitoring was the selected remedy (Navy 2006b). Sediment and surface water monitoring was conducted at the following two sites during the 2013 monitoring event in South Sweeper Creek:

- South of Runway 18-36 Area, locations NSWSD-2, NSWSD-4, NSWSD-5, NSWSD-7 and NSWSD-8
- SWMU 60, Tank Farm A, location 852

Additionally, surface water sampling, sediment sampling or both were conducted at shoreline locations of identified or suspected petroleum seeps. Seep sampling was conducted at the following sites:

- Former Power Plant, Building T-1451, location NL-08 (East Canal)
- NMCB Building T-1416, location NL-05 (Sweeper Cove)
- SWMU 61, Tank Farm B, location NL-04 (North Sweeper Creek)
- SWMU 62, New Housing Fuel Leak Area, location NL-09 (East Canal)

For sites with natural recovery as a remedy, surface water and sediment monitoring is conducted until petroleum concentrations in surface water and sediment are below the risk-based cleanup levels, as established by the risk assessment, and petroleum concentrations in surface water are below ADEC water quality standards. The purpose of the sediment monitoring is to demonstrate that petroleum hydrocarbons in shoreline or bottom sediments are not causing deleterious effects to aquatic life. The purpose of the surface water monitoring is to demonstrate that surface waters and adjoining shorelines remain free from floating oil, film, sheen or discoloration and meet the cleanup levels established in 18 AAC 70 for TAH and TAqH.

All surface water and sediment samples were collected at the same locations as in previous years. Sample locations were determined through negotiations with EPA and ADEC and guided by the observable presence of petroleum contamination, groundwater seep or both.

Chemicals of concern in sediment and surface water for these sites and cleanup levels have been established for South Sweeper Creek at the South of Runway 18-36 Area (Table 3-2). The cleanup levels for both sediment and surface water at this site are based on the results of the risk assessment (Navy and ADEC 2005). These risk-based cleanup levels were set at the risk-based screening criteria for the chemicals that potentially pose an unacceptable ecological risk. Because no criteria have been established for other sites, analytical results for the surface water and sediment samples at the other sites were compared to South of Runway 18-36 cleanup levels; however, these cleanup levels may not correlate to the ecological risks associated with the other sites and may not accurately reflect whether surface water and sediments are being impacted by on-site contamination at unacceptable levels of risk.

Table 3-2. Sediment and Surface Water Cleanup Levels for South of Runway 18-36, South Sweeper Creek

	Sediment	Surface Water	
Chemical	**Risk-Based Cleanup Levels[1,2] (mg/kg)**	**Risk-Based Cleanup Levels[1,2] (µg/L)**	**ADEC Quality Standards[2] (µg/L)**
Total Petroleum Hydrocarbons			
DRO	90.6	250	NA
GRO	12.2	114	NA
TAH	NA	NA	10
TAqH	NA	NA	15
Polycyclic Aromatic Hydrocarbons			
2-Methylnaphthalene	0.0202	NC	NA
Indeno(1,2,3-cd)pyrene	NC	0.28	NA
Phenanthrene	0.225	NC	NA

Notes:
[1] Used as screening criteria to determine potential extent of contamination.
[2] Used as cleanup levels for remediation.

In addition, the ADEC surface water quality standards, established by Alaska Regulation 18 AAC 70, are applicable to surface water at all sites. These standards include numerical criteria for TAH and TAqH (Table 3-2) and the following standards:

- Petroleum hydrocarbons in shoreline or bottom sediments may not cause deleterious effects to aquatic life; and
- Surface waters and adjoining shorelines must be virtually free from floating oil, film, sheen or discoloration.

Natural recovery monitoring will be conducted until petroleum concentrations in surface water and sediment are below the risk-based cleanup levels, as established by the risk assessment, and petroleum concentrations in surface water are below ADEC water quality standards (TAqH and TAH). Natural recovery will be discontinued once the risk-based cleanup levels for

surface water and sediment and the ADEC water quality standards for sheen, TAqH and TAH, are achieved during three consecutive monitoring events in all samples collected at the site.

3.2 LANDFILL SITES MONITORING

Remedial actions completed under the 1995 interim action ROD for the Palisades and Metals Landfills and the remedial actions completed under the closure plans for the White Alice and Roberts Landfills were selected as the final remedies in the OU A ROD. The ROD was signed by all parties on April 13, 2000 (Navy, ADEC and EPA 2000).

3.2.1 SWMU 11, Palisades Landfill

As specified in the ROD, the RAOs for Palisades Landfill (SWMU 11) are to protect human health and ecological receptors from exposure to landfill debris and soil that could result in a cancer risk greater than $1x10^{-5}$, or a non-cancer risk above a hazard index of 1.0. Palisades Landfill was included in the 1995 interim action ROD that specified the placement of a cover over the landfill, monitoring and ICs. The OU A ROD selected the interim actions as the final remedy for Palisades Landfill. The capping, surface water/sediment monitoring and IC actions performed under the interim action ROD were evaluated and determined to be protective. The landfill is now in the post-closure care period and sampling has been reduced to biennially.

3.2.2 SWMU 13, Metals Landfill

As specified in the ROD, the RAOs for Metals Landfill (SWMU 13) are to protect human health and ecological receptors from exposure to landfill debris and soil which could result in a cancer risk greater than $1x10^{-5}$, or a non-cancer risk above a hazard index of 1.0. Metals Landfill was included in the 1995 interim action ROD that specified the placement of a cover over the landfill, monitoring and ICs. The OU A ROD selected the interim actions as the final remedy for Metals Landfill. The capping, groundwater monitoring and IC actions completed under the interim action ROD were evaluated and determined to be protective. Historically the northern edge of Metals Landfill was partially eroded by winter ocean storms. The Navy has evaluated the best methods to stop the erosion and protect this area from future storms. The Navy implemented initial erosion controls in 2000 and has since maintained these controls as defined by the CMP, Revision 5 (Navy 2012a). In 2010, repairs were made to the armor rock along the western shoreline and other erosion controls on the basis of landfill inspection observations in 2009 (Navy 2010). The landfill is now in the post-closure care period, and sampling has been reduced to once every 5 years.

3.2.3 SWMUs 18/19, White Alice Landfill

The White Alice Landfill (SWMUs 18 and 19) was permitted and closed under the State of Alaska solid waste regulations (18 AAC 60). The RAOs for the White Alice Landfill are to meet the post-closure care requirements of ADEC solid waste regulations (18 AAC 60) by maintaining the surface water/erosion controls, access restrictions and vegetative cover, and by performing periodic groundwater and surface water monitoring. These selected remedies complied with 18 AAC 60 and the permit requirements for closure of the sites. These actions were also consistent with presumptive remedies for landfills under EPA Office of Solid Waste and Emergency Response (OSWER) Directive 9355.0-67FS – 1996. Repairs to eroded areas, erosion controls and access restrictions were completed in 2010 (Navy 2010). The landfill is now in the post-closure care period, and sampling has been reduced to once every 5 years.

3.2.4 SWMU 25, Roberts Landfill

The Roberts Landfill (SWMU 25) was permitted and closed under State of Alaska solid waste regulations (18 AAC 60). The RAOs for Roberts Landfill are to meet the post-closure care requirements of Alaska solid waste regulations by maintaining the surface water/erosion controls, access restrictions and vegetative cover, and by performing periodic groundwater and surface water monitoring. These selected remedies complied with 18 AAC 60 and the permit requirements for closure of the site. These actions were also consistent with presumptive remedies for landfills under EPA OSWER Directive 9355.0 67FS – 1996. In addition, annual site inspections for the Roberts Landfill have been prescribed for the past 5 years. Repairs to eroded areas, erosion controls and access restrictions were completed in 2010 (Navy 2010). A 5-year review was completed in December 2011. The landfill is now in the post-closure care period and sampling has been reduced to biennially.

3.2.5 Endpoint Criteria

For the purposes of this report and for consistency with previous monitoring events, the analytical results for each media type (groundwater, surface water and sediment) were compared with the endpoint criteria presented in Tables 3-3 and 3-4 for Palisades and Roberts Landfills which were the two landfills scheduled for sampling in 2013. Monitoring endpoints are specified in the CMP, Revision 5 (Navy 2012a). Endpoint criteria are also presented in the analytical results tables for each landfill in their separate sections along with references for each endpoint source or justification. Endpoint criteria were established only for target analytes as per the OU A ROD.

Palisades Landfill sediment criteria were revised in 2007 (CMP, Revision 5; Navy 2012a). Those endpoint criteria were derived from the ecological and human health risk-based screening concentrations (RBSCs) provided in the Preliminary Source Evaluation 2 (PSE-2) Guidance Document (Navy 1996) and from the studies of Long et al. (1995) which requires the summation of six select PAHs—benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene and indeno(1,2,3-c,d)pyrene—for comparison to one endpoint criteria. Contaminant concentrations reported below reporting limits are not included in the summation.

Table 3-3. Sediment Endpoint Criteria for SWMU 11, Palisades Landfill

	Endpoint Criteria[3]		
Chemical	**Long et. al. 1995 Freshwater and Marine[1]**	**Ecological RBSC[2]**	**Human Health RBSC[2]**
Total Metals (mg/kg)			
Antimony	none	2	none
Arsenic	8.2	none	none
Nickel	20.9	none	none
SVOCs – Bis(2-ethylhexyl)phthalate and PAHs (µg/kg)			
Benzo(a)anthracene	Sum of PAHs	none	none
Benzo(a)pyrene		none	none
Benzo(b)fluoranthene		none	none
Benzo(g,h,i)perylene		none	none
Benzo(k)fluoranthene		none	none
Indeno(1,2,3-c,d)pyrene		none	none
Sum[4] of Above PAHs	1,700		
Bis(2-ethylhexyl) phthalate	none	none	4,560
PCBs (Aroclors) (µg/kg)			
Aroclor 1016	Sum of Aroclors	none	none
Aroclor 1221		none	none
Aroclor 1232		none	none
Aroclor 1242		none	none
Aroclor 1248		none	none
Aroclor 1254		none	none
Aroclor 1260		none	none
Sum[4] of Above Aroclors	22.7[2]		

Notes:
[1] Marine sediment (Long et al. 1995)
[2] Final PSE-2 Guidance Document for Adak (Navy 1996)
[3] Total organic carbon normalization is not required for comparison to endpoint criteria.
[4] Non-detected results are assumed to be zero and are not included in the summation.

Table 3-4. Surface Water and Groundwater Monitoring Endpoints for SWMU 25, Roberts Landfill

	Surface Water		Groundwater
	Alaska Cleanup Levels 18 AAC 75.345 (µg/L)[1]		Alaska Cleanup Levels 18 AAC 75.345 (µg/L)
Target Analyte	**Aquatic Life**	**Human Health**	
Volatile Organic Compounds (µg/L)			
1,1-Dichloroethene	None	320	7
Benzene	None	710[2]	5
Cis-1,2-dichloroethene	None	None	70
Ethylbenzene	None	3,280	700
Tetrachloroethylene	None	88.5	5
Toluene	None	424,000	1,000
Trans-1,2-dichloroethene	None	None	100
Trichloroethene	None	810	5
Total xylenes	None	None	10,000
Total Metals (µg/L)			
Aluminum	87	None	None
Antimony	None	45,000	6
Arsenic	190	1.4[2]	50
Beryllium	190	1.4	4
Cadmium	1.1[3]	None	5
Chromium	210[3,4]	None	100
Copper	12[3]	None	1,300
Lead	3.2[3]	None	15
Mercury	0.012	0.15	2
Nickel	160[3]	100	100
Selenium	5	None	50
Silver	0.12	None	180
Thallium	None	48	2
Zinc	110[3]	None	11,000

Notes:
[1] Criteria that was existing in 18 AAC 70 when ROD for OU A and landfills were signed. (Changes to some of these criteria were adopted in an 18 AAC 70 amendment on March 24, 2003.)
[2] Human health criteria for carcinogens comes from EPA promulgation of human health criteria for carcinogens for Alaska at the 10^{-5} risk level in the National Toxics Rule (40 Code of Federal Regulations 131.36) in accordance with ADEC guidance.
[3] At 100 milligrams per liter hardness
[4] Value provided is for chromium III. The criteria for chromium VI is 11 µg/L.

4 SAMPLING PROGRAM

This section describes the sampling program, including field procedures and sampling requirements, for the 2013 annual groundwater and landfill monitoring at the OU A sites. Field activities included groundwater sampling, collection of groundwater quality parameter measurements, surface water sampling, sediment sampling, product thickness measurements, depth-to-groundwater measurements, shoreline inspections, well inspections and handling of investigation-derived waste (IDW). All 2013 monitoring activities followed the CMP, Revision 5 (Navy 2012a) and the updated CMP Appendix A and B tables (Navy 2013a). Updates to the CMP Appendix A and B tables were based on the recommendations in the Final 2012 Groundwater Monitoring Report (Navy 2013b) and Final 2011 Landfill Monitoring Report (Navy 2012c) which were negotiated with ADEC and EPA.

Monitoring activities occurred from August 26 through September 17, 2013. During the monitoring event, groundwater sample collection was performed at 88 groundwater monitoring locations for 19 sites (Figure 2-1), and 12 surface water and 10 sediment samples were collected from locations at six sites. Product thickness and depth-to-water measurements were performed at 162 locations from these sites. Standard Operating Procedures (SOPs) and Stand-Alone Specific Instructions from the CMP, Revision 5 (Navy 2012a) were followed for sample collection activities. Copies of the field forms and logbooks documenting 2013 field activities are included in Appendix A.

4.1 FIELD ACTIVITIES

Table 4-1 summarizes the 2013 field activities by site and location. Table 4-2 summarizes the environmental samples and laboratory analytical methods performed on groundwater, surface water and sediment from petroleum-release and non-landfill CERCLA sites that were collected in 2013 by location. Table 4-3 summarizes the environmental samples and laboratory analytical methods performed on groundwater, surface water and sediment from petroleum-release and non-landfill CERCLA sites that were collected in 2013 by location.

4.1.1 Field Measurements

Field measurements recorded during 2013 groundwater monitoring activities included the physical measurements of depth-to-groundwater and product thickness. Water level and free product measurements were taken at 162 wells. NAVFAC SOP I-D-5 (Water Level Measurements) and Stand-Alone Specific Instruction #3 (Well Measurements) were followed

during the collection of depth-to-groundwater and product thickness measurements. Water levels and product thicknesses are presented in Appendix D-1. Water levels were corrected if floating product was observed in the wells by using the following equation:

$$DTW_C = DTW_M - ([\rho_{lnapl} / \rho_{water}] * MPT)$$

Where: ρ_{lnapl} – density of light non-aqueous phase liquid
ρ_{water} – density of water (1,000 kilograms per cubic meter [kg/m^3])
DTW_C – corrected depth-to-water
DTW_M – measured depth-to-water
MPT – measured product thickness

The type of product present in each affected well was determined to be either diesel or gasoline, and the appropriate light non-aqueous phase liquid density was used in the correction equation. The density used was 820 kilograms per cubic meter (kg/m^3) for diesel and 737.22 kg/m^3 for gasoline (SImetric 2007). Analytical results for each affected well were reviewed and the fuel with the highest concentration was selected. If equal concentrations of gasoline and diesel were found, diesel was selected based on the assumption that the gasoline was weathered and had a higher density and therefore, the density of diesel best approximated that of the product in the well. If a well had no analytical results associated with it, results for nearby wells at the same site were used for the product selection.

Corrected groundwater elevations were used to interpret groundwater flow direction based on potentiometric surface. For some sites, an insufficient number of wells exist to calculate a potentiometric surface, so at these sites, groundwater flow direction was estimated based on historical studies and topographic surface. Groundwater flow direction at most LTM sites (except Area 303 and Former Power Plant, Building T-1451) has been well established through the collection of groundwater elevation data since 2005. Since then, groundwater flow direction has not varied at these sites. Groundwater elevations collected in 2013 were compared to historical elevations presented in Appendix D-2. For all LTM sites, monitored in 2013 except Area 303 and Former Power Plant, Building T-1451 groundwater flow directions remained consistent with previous interpreted flow directions.

During the summer of 2012 and in April 2013, the Navy performed cleanup actions and subsurface soil and groundwater investigation to further assess type and extent of groundwater contamination at Area 303 and Former Power Plant, Building T-1451. As a result of these investigations, the remedy of free product recovery and long-term groundwater monitoring was selected for Area 303 and monitoring at 17 wells at this site were added to the LTM sampling program for the 2013 field event. Similarly, nine newly installed monitoring wells at

Former Power Plant, Building T-1451 were added to the 2013 LTM program to better assess the progression of the remedy of MNA at the site. Since historical groundwater elevations do not exist for these wells, potentiometric surfaces were calculated for these two sites (Figures 7-1 and 8-1) to determine and verify groundwater flow directions.

Field measurements recorded during 2013 groundwater monitoring activities also included the collection of the water quality parameter measurements of pH, oxidation-reduction potential (ORP), specific conductance, turbidity, dissolved oxygen (DO), temperature and salinity. Methane was also measured in well headspace at SWMU 25, Roberts Landfill wells prior to the collection of water quality parameters. NAVFAC SOP I-D-7 (Field Parameter Measurement) was followed for all WQP measurements. Measurements of WQPs were recorded approximately every 3 minutes during evacuation of water from each well to determine that groundwater parameters had stabilized before the groundwater sample was collected. These field measurements were collected using a Horiba U-22 water quality meter. Once each parameter stabilized or three well casing volumes were removed (by low-flow sampling method), a sample was collected for laboratory analysis. The resultant data were used to verify samples representative of actual groundwater conditions. Final water quality parameter measurements are presented for each petroleum-release and non-landfill CERCLA well by site in Sections 7 through 25. Field measurements collected at landfill sites including water quality parameters and methane well headspace measurements are presented in Appendix D-3.

Table 4-1. Summary of 2013 Field Activities by Site and Location

Site Name	Sample Matrix	Location Cross Reference	Water Quality Parameters[1]	Water Level/ Product Thickness	Chemical Analysis	TAH/ TAqH[2]	Shoreline Visual Inspection[3]	Methane	NAPs	Comments
Area 303	Groundwater	03-107	X	X	X				X	
	Groundwater	03-012	X	X	X	X	X		X	
	Groundwater	04-211[4]	X	X	X				X	
	Groundwater	MRP-MW2[5]	X	X	X				X	
	Groundwater	MW-303-28	NC	X	NC				NC	Product thickness 0.02 feet or greater, no sample collected.
	Groundwater	MW-303-30	X	X	X				X	
	Groundwater	MW-303-31	X	X	X				X	
	Groundwater	MW-303-32	X	X	X				X	
	Groundwater	MW-303-33	X	X	X				X	
	Groundwater	MW-303-37	X	X	X	X	X		X	
	Groundwater	MW-303-38	X	X	X				X	
	Groundwater	MW-303-39	X	X	X				X	
	Groundwater	MW-303-40	X	X	X				X	
	Groundwater	MW-303-41	X	X	X				X	
	Groundwater	MW-303-42	NC	NC	NC				NC	Well dry, no sample collected.
	Groundwater	MW-303-43	X	X	X				X	
	Groundwater	MW-303-44	X	X	X				X	
Former Power Plant, Building T-1451	Groundwater	01-118	X	X	X				X	
	Groundwater	01-150	X	X	X				X	
	Groundwater	MW-1451-1	X	X	X		X		X	
	Groundwater	MW-1451-2	X	X	X	X	X		X	
	Groundwater	MW-1451-3	X	X	X	X	X		X	
	Groundwater	MW-1451-4	X	X	X	X	X		X	
	Groundwater	MW-1451-5	X	X	X				X	
	Groundwater	MW-1451-6	X	X	X				X	
	Groundwater	MW-1451-7	NC	X	NC				NC	Product thickness 0.02 feet or greater, no sample collected.

Table 4-1. Summary of 2013 Field Activities by Site and Location (continued)

Site Name	Sample Matrix	Location Cross Reference	Water Quality Parameters[1]	Water Level/ Product Thickness	Chemical Analysis	TAH/ TAqH[2]	Shoreline Visual Inspection[3]	Methane	NAPs	Comments
Former Power Plant, Building T-1451 (continued)	Groundwater	MW-1451-8	X	X	X				X	
	Groundwater	MW-1451-9	NC	X	NC				NC	Product thickness 0.02 feet or greater, no sample collected.
	Groundwater	E-701	X	X	X				X	Background well, NAPs only.
	Surface Water	NL-08	X		X	X	X			
	Sediment	NL-08			X		X			
GCI Compound, UST GC-1	Groundwater	04-100	X	X	X					
	Groundwater	04-201		X						
	Groundwater	04-202	X	X	X					
	Groundwater	04-203		X						
	Groundwater	04-204	X	X	X					
	Groundwater	04-210	X	X	X					
	Groundwater	04-211[4]		X						
	Groundwater	04-213	X	X	X					
	Groundwater	04-701	X	X	X					
Housing Area (Arctic Acres)	Groundwater	03-416	X	X	X					
	Groundwater	03-420	X	X	X					
	Groundwater	03-421	X	X	X					
	Groundwater	03-890	X	X	X					
NMCB Building T-1416	Groundwater	02-300		X						
	Groundwater	02-301		X						
	Groundwater	02-451	X	X	X		X			
	Groundwater	02-452		X						
	Groundwater	02-453		X			X			
	Groundwater	02-455		X			X			
	Groundwater	02-461	X	X	X					
	Groundwater	02-463		X						
	Groundwater	02-478		X						

Table 4-1. Summary of 2013 Field Activities by Site and Location (continued)

Site Name	Sample Matrix	Location Cross Reference	Water Quality Parameters[1]	Water Level/ Product Thickness	Chemical Analysis	TAH/ TAqH[2]	Shoreline Visual Inspection[3]	Methane	NAPs	Comments
NMCB Building T-1416 (continued)	Groundwater	02-479	X	X	X		X			
	Groundwater	02-497		X						
	Groundwater	02-815		X			X			
	Groundwater	02-816		X						
	Groundwater	02-817		X						
	Groundwater	02-818	X	X	X		X			
	Groundwater	02-819		X						
	Groundwater	E-201	X	X	X		X			
	Groundwater	NMCB-04		X						
	Groundwater	NMCB-07	NC	X	NC		X			Product thickness 0.02 feet or greater, no sample collected.
	Groundwater	NMCB-08		X			X			
	Groundwater	NMCB-09		X						
	Groundwater	NMCB-10	NC	X	NC		X			Product thickness 0.02 feet or greater, no sample collected.
	Groundwater	NMCB-11	NC	X	NC		X			Product thickness 0.02 feet or greater, no sample collected.
	Groundwater	NMCB-12		X			X			
	Sediment	NL-05			X		X			Collected downgradient of well NMCB-07
ROICC Contractor's Area, UST ROICC-7	Groundwater	08-200	X	X	X					
	Groundwater	08-202	X	X	X					
Runway 5-23 Avgas Valve Pit	Groundwater	14-100	X	X	X					

Table 4-1. Summary of 2013 Field Activities by Site and Location (continued)

Site Name	Sample Matrix	Location Cross Reference	Water Quality Parameters[1]	Water Level/ Product Thickness	Chemical Analysis	TAH/ TAqH[2]	Shoreline Visual Inspection[3]	Methane	NAPs	Comments
SA 79, Main Road Pipeline, South End	Groundwater	02-230	X	X	X		X			
	Groundwater	MRP-MW8	X	X	X		X			
	Groundwater	601	X	X	X		X			
SA 80, Steam Plant 4	Groundwater	04-155		X						
	Groundwater	04-157		X						
	Groundwater	04-158	X	X	X					
	Groundwater	04-159	X	X	X					
	Groundwater	04-164		X						
	Groundwater	04-173	X	X	X					
	Groundwater	SP4-3	X	X	X					
South of Runway 18-36 Area	Groundwater	02-231	X	X	X	X	X			
	Groundwater	02-232	X	X	X	X	X			
	Groundwater	18/36-02		X						
	Groundwater	AS-1	X	X	X	X	X			
	Groundwater	E-213		X						
	Groundwater	E-216		X			X			
	Groundwater	E-217		X						
	Groundwater	RW-18/36-03		X						
	Groundwater	RW-18/36-04		X						
	Groundwater	RW-18/36-05		X						
	Groundwater	Z3-6		X						
	Groundwater	Z4-2		X						
	Sediment	NSWSD-2			X		X			
	Sediment	NSWSD-4			X		X			
	Sediment	NSWSD-5			X		X			
	Surface Water	NSWSD-7	X		X	X	X			
	Surface Water	NSWSD-8	X		X	X	X			

Table 4-1. Summary of 2013 Field Activities by Site and Location (continued)

Site Name	Sample Matrix	Location Cross Reference	Water Quality Parameters[1]	Water Level/ Product Thickness	Chemical Analysis	TAH/ TAqH[2]	Shoreline Visual Inspection[3]	Methane	NAPs	Comments
SWMU 11, Palisades Landfill	Sediment	101			X		X			
	Sediment	102			X		X			
	Sediment	103			X		X			
SWMU 14, Old Pesticide Storage and Disposal Area	Groundwater	01-153	X	X	X					
	Groundwater	MW-14-5	X	X	X					
	Groundwater	MW-15-424		X						
	Groundwater	MW-15-3		X						
SWMU 17, Power Plant No. 3 Area	Groundwater	05-735	X	X	X					
SWMU 25, Roberts Landfill	Groundwater	A-2	X		X		X	X		
	Groundwater	A-3	X		X		X	X		
	Groundwater	A-5	X		X		X	X		
	Groundwater	B-1	X		X		X	X		
	Surface Water	RLSW01	NC		NC		NC			No sample collected. Location was dry.
	Surface Water	RLSW02	NC		NC		NC			No sample collected. Location was dry.
	Surface Water	RLSW03	X		X		X			
	Surface Water	RLSW04	X		X		X			
	Surface Water	RLSW05	X		X		X			
	Surface Water	NL-11	X		X		X			
	Surface Water	NL-12	X		X		X			
	Surface Water	NL-14	X		X		X			Blue seep sample

Table 4-1. Summary of 2013 Field Activities by Site and Location (continued)

Site Name	Sample Matrix	Location Cross Reference	Water Quality Parameters[1]	Water Level/ Product Thickness	Chemical Analysis	TAH/ TAqH[2]	Shoreline Visual Inspection[3]	Methane	NAPs	Comments
SWMU 55, Public Works Transportation Department Waste Storage Area	Groundwater	55-145	X	X	X					
	Groundwater	55-146		X						
SWMU 60, Tank Farm A	Groundwater	LC5A	X	X	X	X	X			
	Groundwater	MW E006	X	X	X					
	Groundwater	650	X	X	X	X	X			
	Groundwater	651	X	X	X	X				
	Groundwater	652	NC	X	NC	NC	X			Product thickness 0.02 feet or greater, no sample collected.
	Groundwater	653	NC	X	NC	NC	X			Product thickness 0.02 feet or greater, no sample collected.
	Surface Water	852	X		X	X	X			
	Sediment	852			X		X			
SWMU 61, Tank Farm B	Groundwater	TFB-MW4B	X	X	X					
	Groundwater	14-113	X	X	X	X	X			
	Groundwater	14-210	X	X	X		X			
	Surface Water	NL-04	X		X	X	X			
	Sediment	NL-04			X		X			
SWMU 62, New Housing Fuel Leak, Sandy Cove Housing	Groundwater	03-104	X	X	X					
	Groundwater	03-155	X	X	X					
	Groundwater	03-619	X	X	X					
	Groundwater	03-778	X	X	X					
	Groundwater	HMW-146-1		X						
	Groundwater	MRP-MW2[5]	X	X	X				X	
	Groundwater	MRP-MW3	X	X	X					

Table 4-1. Summary of 2013 Field Activities by Site and Location (continued)

Site Name	Sample Matrix	Location Cross Reference	Water Quality Parameters[1]	Water Level/ Product Thickness	Chemical Analysis	TAH/ TAqH[2]	Shoreline Visual Inspection[3]	Methane	NAPs	Comments
SWMU 62, New Housing Fuel Leak, Sandy Cove Housing (continued)	Groundwater	MW-107-1	X	X	X					
	Groundwater	MW-134-10		X						
	Groundwater	MW-134-11	X	X	X					
	Groundwater	MW-146-1	X	X	X					
	Groundwater	MW-187-1	X	X	X					
	Groundwater	RW-102-4		X						
SWMU 62, New Housing Fuel Leak, Eagle Bay Housing	Groundwater	03-101		X						
	Groundwater	03-102		X						
	Groundwater	03-103		X						
	Groundwater	03-109		X						
	Groundwater	03-502	X	X	X					
	Groundwater	03-898		X						
	Groundwater	AMW-704	X	X	X					
	Groundwater	MW-15		X						
	Groundwater	HMW-303-3		X						
	Groundwater	HMW-303-4		X						
	Groundwater	HMW-303-11		X						
	Groundwater	MW-303-7	X	X	X					
	Groundwater	MW-303-8		X						
	Groundwater	MW-303-12		X						
	Groundwater	RW-303-4		X						
	Groundwater	RW-303-13	X	X	X					
	Groundwater	RW-303-14		X						
	Groundwater	RW-303-15		X						
	Groundwater	RW-303-16	X	X	X					
	Surface Water	NL-09	X		X	X	X			
	Sediment	NL-09			NC		NC			Sample not collected because East Canal water level was too

Table 4-1. Summary of 2013 Field Activities by Site and Location (continued)

Site Name	Sample Matrix	Location Cross Reference	Water Quality Parameters[1]	Water Level/ Product Thickness	Chemical Analysis	TAH/ TAqH[2]	Shoreline Visual Inspection[3]	Methane	NAPs	Comments
										high.
Tanker Shed, UST	Groundwater	04-175	X	X	X					
	Groundwater	04-290	X	X	X					
	Groundwater	04-301		X						
	Groundwater	04-302		X						
	Groundwater	04-306	X	X	X					
	Groundwater	04-312		X						
	Groundwater	04-313		X						
	Groundwater	04-601	X	X	X					
	Groundwater	TS-03		X						

Notes:
[1] Water quality parameters include pH, specific conductance, salinity, temperature, turbidity, dissolved oxygen and oxidation-reduction potential with a Horiba U-22 or equivalent.
[2] Collected at surface water protection monitoring locations.
[3] Visual inspection of adjacent shoreline and surface water conducted for visible petroleum seeps or sheens.
[4] Monitored for both Area 303 and GCI Compound.
[5] Sampled for both Area 303 and SWMU 62, New Housing Fuel Leak Area, Sandy Cove Housing.

Table 4-2. Environmental Quantities and Laboratory Analytical Methods for Groundwater, Surface Water and Sediment Samples by Location for Petroleum-Release and Non-Landfill CERCLA Sites

Site Name	Monitoring Type	Location	Sample Matrix	QA/QC Samples	GRO (AK 101)	BTEX (8260C)	Benzene (8260C)	DRO (AK 102)	Total Lead (6020A)	Dissolved Lead (6020A)	VOCs[1] (8260C)	PAHs (8270D SIM)	NAPs Alkalinity (SM2320B)	NAPs Sulfate (300.0)	NAPs Methane (RSK175)
Area 303	MNA	03-107	GW	Duplicate 03-117	2		2		2	2			2	2	2
	MNA/SWP	03-012	GW	MS/MSD (GRO/NAPs)	1	1		1				1	1	1	1
	MNA	04-211[2]	GW		1								1	1	1
	MNA	MRP-MW2[3]	GW	Duplicate MRP-MW12	1	2		1	1	1			1	1	1
	MNA	MW-303-28	GW		NC				NC	NC		NC	NC	NC	NC
	MNA	MW-303-30	GW		1	1			1	1		1[4]	1	1	1
	MNA	MW-303-31	GW		1	1			1	1		1[4]	1	1	1
	MNA	MW-303-32	GW		1		1	1					1	1	1
	MNA	MW-303-33	GW		1		1						1	1	1
	MNA/SWP	MW-303-37	GW		1	1		1				1	1	1	1
	MNA	MW-303-38	GW		1	1			1	1		1[4]	1	1	1
	MNA	MW-303-39	GW		1	1			1	1		1[4]	1	1	1
	MNA	MW-303-40	GW		1	1			1	1		1[4]	1	1	1
	MNA	MW-303-41	GW		NC	NC			NC	NC		NC	NC	NC	NC
	MNA	MW-303-42	GW	MS/MSD (NAPs)	1		1						1	1	1
	MNA	MW-303-43	GW		1								1	1	1
	MNA	MW-303-44	GW		1								1	1	1
Former Power Plant, Building T-1451	MNA	01-118	GW					1					1	1	1
	MNA	01-150	GW					1					1	1	1
	MNA	MW-1451-1	GW					1					1	1	1
	MNA/SWP	MW-1451-2	GW	Duplicate MW-1451-12		1		1				1	2	2	2
	MNA/SWP	MW-1451-3	GW			1		1				1	1	1	1
	MNA/SWP	MW-1451-4	GW			1		1				1	1	1	1
	MNA	MW-1451-5	GW					1					1	1	1
	MNA	MW-1451-6	GW					1					1	1	1
	MNA	MW-1451-7	GW					NC					NC	NC	NC
	MNA	MW-1451-8	GW					1					1	1	1
	MNA	MW-1451-9	GW					NC					NC	NC	NC
	MNA	E-701	GW	MS/MSD (NAPs)									1	1	1
	SWP	NL-08	SW	Duplicate NL-18		1		2				1			
	SWP	NL-08S	SD	Duplicate NL-18S				1				2[5]			

Table 4-2. Environmental Quantities and Laboratory Analytical Methods for Groundwater, Surface Water and Sediment Samples by Location for Petroleum-Release and Non-Landfill CERCLA Sites (continued)

Site Name	Monitoring Type	Location	Sample Matrix	QA/QC Samples	GRO (AK 101)	BTEX (8260C)	Benzene (8260C)	DRO (AK 102)	Total Lead (6020A)	Dissolved Lead (6020A)	VOCs[1] (8260C)	PAHs (8270D SIM)	NAPs Alkalinity (SM2320B)	NAPs Sulfate (300.0)	NAPs Methane (RSK175)
GCI Compound, UST GCI-1	MNA	04-100	GW	Duplicate 04-110	2										
	MNA	04-202	GW		1										
	MNA	04-204	GW		1										
	MNA	04-210	GW		1										
	MNA	04-213	GW		1										
	MNA	04-701	GW		1										
Housing Area (Arctic Acres)	MNA	03-416	GW					1							
	MNA	03-420	GW					1							
	MNA	03-421	GW	Duplicate 03-431				2							
	MNA	03-890	GW					1							
NMCB	MNA	02-451	GW	MS/MSD (GRO)	1										
	MNA	02-461	GW		1										
	MNA/SWP	02-479	GW		1										
	MNA/SWP	02-818	GW		1										
	MNA	E-201	GW		1										
	MNA/SWP	NMCB-07	GW		NC										
	MNA/SWP	NMCB-09	GW		1										
	MNA/SWP	NMBC-10	GW		NC										
	MNA/SWP	NMCB-11	GW		NC										
	SWP	NL-05S	SD		1										
ROICC Contractor's Area	MNA	08-200	GW	MS/MSD (benzene)			1								
	MNA	08-202	GW				1								
Runway 5-23 Avgas Valve Pit	MNA	14-100	GW		1										
SA 79, Main Road Pipeline, South End	MNA/SWP	02-230	GW					1							
	MNA	601	GW					1							
	MNA	MRP-MW8	GW	Duplicate MRP-MW18				2							
SA 80, Steam Plant 4, USTs 27089 and 27090	MNA	04-158	GW					1							
	MNA	04-159	GW					1							
	MNA	04-173	GW					1							
	MNA	SP4-3	GW					1							

Table 4-2. Environmental Quantities and Laboratory Analytical Methods for Groundwater, Surface Water and Sediment Samples by Location for Petroleum-Release and Non-Landfill CERCLA Sites (continued)

Site Name	Monitoring Type	Location	Sample Matrix	QA/QC Samples	GRO (AK 101)	BTEX (8260C)	Benzene (8260C)	DRO (AK 102)	Total Lead (6020A)	Dissolved Lead (6020A)	VOCs[1] (8260C)	PAHs (8270D SIM)	NAPs Alkalinity (SM2320B)	NAPs Sulfate (300.0)	NAPs Methane (RSK175)
South of Runway 18-36 Area	MNA/SWP	02-231	GW	Duplicate 02-241		2		1				2			
	MNA/SWP	02-232	GW	MS/MSD (BTEX)		1						1			
	MNA/SWP	AS-1	GW	MS/MSD (PAHs)		1						1			
	NR	NSWSD-7	SW	MS/MSD (BTEX/DRO/ PAH)		1		1				1			
	NR	NSWSD-8	SW			1		1				1			
	NR	NSWSD-2S	SD					1				1[5]			
	NR	NSWSD-4S	SD	MS/MSD (DRO/ PAH)				1				1[5]			
	NR	NSWSD-5S	SD					1				1[5]			
SWMU 14, Old Pesticide Storage and Disposal Area	MNA	MW-14-5	GW	MS/MSD (lead)	1			1	1	1					
	Compliance	01-153	GW	MS/MSD (VOCs)							1				
SWMU 17, Power Plant No. 3 Area	Compliance	05-735	GW	Duplicate 05-745							2				
SWMU 55, Public Transportation Dept. Waste Storage Area	MNA	55-145	GW								1				
SWMU 60, Tank Farm A	MNA/SWP	LC5A	GW			1						1			
	MNA	MW-E006	GW				1								
	MNA	650	GW			1		1				1			
	MNA	651	GW			1		1				1			
	MNA	652	GW			NC		NC				NC			
	MNA	653	GW			NC		NC				NC			
	NR	852	SW			1		1				1			
	NR	852S	SD	Duplicate 862S				2				1			

Table 4-2. Environmental Quantities and Laboratory Analytical Methods for Groundwater, Surface Water and Sediment Samples by Location for Petroleum-Release and Non-Landfill CERCLA Sites (continued)

Site Name	Monitoring Type	Location	Sample Matrix	QA/QC Samples	GRO (AK 101)	BTEX (8260C)	Benzene (8260C)	DRO (AK 102)	Total Lead (6020A)	Dissolved Lead (6020A)	VOCs[1] (8260C)	PAHs (8270D SIM)	NAPs Alkalinity (SM2320B)	NAPs Sulfate (300.0)	NAPs Methane (RSK175)
SWMU 61, Tank Farm B	MNA/SWP	14-113	GW		1	1						1			
	MNA/SWP	14-210	GW	MS/MSD (BTEX)	1	1									
	MNA	TFB-MW4B	GW		1	1									
	SWP	NL-04	SW	MS/MSD (GRO)	1	1						1			
	SWP	NL-04S	SD	Duplicate NL-14S MS/MSD (GRO, BTEX)	2	2									
SWMU 62, New Housing Fuel Leak, Sandy Cove Housing	MNA	03-104	GW					1							
	MNA	03-155	GW					1							
	MNA	03-619	GW	MS/MSD (DRO)				1							
	MNA	03-778	GW					1							
	MNA	MRP-MW2[3]	GW	Duplicate MRP-MW12	1	2		1	1	1			1	1	1
	MNA	MRP-MW3	GW		1	1		1							
	MNA	MW-107-1	GW					1							
	MNA	MW-134-11	GW					1							
	MNA	MW-146-1	GW					1							
	MNA	MW-187-1	GW					1							
SWMU 62, New Housing Fuel Leak, Eagle Bay Housing	MNA	03-502	GW		1										
	MNA/SWP	AMW-704	GW					1							
	MNA	MW-303-7	GW					1							
	MNA/SWP	RW-303-13	GW	MS/MSD (DRO)				1							
	MNA/SWP	RW-303-16	GW					1							
	SWP	NL-09	SW	Duplicate NL-19	2	2		1				2			
	SWP	NL-09S	SD		NC	NC		NC				NC[5]			

Table 4-2. Environmental Quantities and Laboratory Analytical Methods for Groundwater, Surface Water and Sediment Samples by Location for Petroleum-Release and Non-Landfill CERCLA Sites (continued)

Site Name	Monitoring Type	Location	Sample Matrix	QA/QC Samples	GRO (AK 101)	BTEX (8260C)	Benzene (8260C)	DRO (AK 102)	Total Lead (6020A)	Dissolved Lead (6020A)	VOCs[1] (8260C)	PAHs (8270D SIM)	NAPs		
													Alkalinity (SM2320B)	Sulfate (300.0)	Methane (RSK175)
Tanker Shed, UST 42494	MNA	04-175	GW					1							
	MNA	04-290	GW	Duplicate 04-300				2							
	MNA	04-306	GW					1							
	MNA/SWP	04-601	GW	MS/MSD (DRO)				1							
Totals					**42**	**32**	**8**	**60**	**9**	**9**	**4**	**21**	**27**	**27**	**27**

Notes:
[1] PCE, TCE and daughter products: 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,-2-dichloroethene and vinyl chloride
[2] Monitored for both Area 303 and GCI Compound.
[3] Sampled for both Area 303 and SWMU 62, New Housing Fuel Leak Area.
[4] Analyzed for dibenz(a,h)anthracene only.
[5] Analyzed for 2-methylnaphthlalene and phenanthrene only.

Table 4-3. Environmental Quantities and Laboratory Analytical Methods for Groundwater, Surface Water and Sediment Samples by Location for Landfill Sites

				Water Analysis										Sediment Analysis		
								Water Quality Parameters								
Site	**Matrix**	**Location**	**QA/QC Samples**	**Dissolved PP Metals (6020A/ 7470A Hg)[1]**	**Total PP Metals (6020A/ 7470A Hg)[1]**	**Total and Dissolved Aluminum (6020A)**	**VOCs[2] (8260C)**	**Alkalinity (SM 2320B)**	**Chemical Oxygen Demand (SM 5220C)**	**Sulfate (300.0)**	**Total Dissolved Solids (SM 2540C)**	**Total Kjeldahl Nitrogen (ASTM D1426-93B)**	**Ammonia Nitrogen (SM 4500G)**	**PCB Aroclors (8082A Low Level)**	**Metals[3] (6020A)**	**SVOCs (8270D[4])**
SWMU 11, Palisades Landfill	SD	101S	MS/MSD (All)											1	1	1
	SD	102S	Duplicate 112S											2	2	2
	SD	103S	103											1	1	1
SWMU 25, Roberts Landfill	GW	A-2	Duplicate A-12	2	2	4	2	1	1	1	1	1	1			
	GW	A-3		1	1	2	1	1	1	1	1	1	1			
	GW	A-5		1	1	2	1	1	1	1	1	1	1			
	GW	B-1	MS/MSD (PP Metals /Aluminum/ VOCs)	1	1	2	1	1	1	1	1	1	1			
	SW	RLSW01		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC			
	SW	RLSW02		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC			
	SW	RLSW03	Duplicate RLSW13	1	1	2	1	2	2	2	2	2	2			
	SW	RLSW04	MS/MSD (All WQPs)	1	1	2	1	1	1	1	1	1	1			
	SW	RLSW05	RLSW05	1	1	2	1	1	1	1	1	1	1			
	SW	NL-11	NL-11	1	1	2		1	1	1	1	1	1			
	SW	NL-12	NL-12	1	1	2		1	1	1	1	1	1			
	SW	NL-14	NL-14	1	1	2		1	1	1	1	1	1			
Totals				**11**	**11**	**22**	**8**	**11**	**11**	**11**	**11**	**11**	**11**	**4**	**4**	**4**

Notes:
[1] 13 priority pollutants (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium and zinc).
[2] Analytes of particular interest include BTEX and the ethenes (1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, tetrachloroethene and trichloroethene); additional VOCs will be reported by the laboratory.
[3] Antimony, arsenic, nickel
[4] PAHs (8270D SIM) and bis(2-ethylhexyl)phthalate (8270D Low Level)

4.1.2 Natural Attenuation Parameters Assessment

Reduction of dissolved petroleum concentrations in groundwater through natural attenuation has been demonstrated with data collected from previous sampling efforts. Biodegradation of petroleum hydrocarbons varies depending on the type of hydrocarbon. Gasoline, avgas and jet fuel no. 5 (JP-5) were the most extensively used hydrocarbons on Adak Island. Gasoline and avgas are composed primarily of relatively volatile hydrocarbons containing 4 to 12 carbon atoms, including the BTEX compounds. JP-5 is a kerosene-based fuel composed primarily of relatively low-volatility hydrocarbons containing 11 to 13 carbon atoms and relatively insignificant (less than 1 percent by weight mass fraction) BTEX content.

The biodegradation of BTEX compounds to form the final end product of carbon dioxide is a generally well understood process. The efficiency of biodegradation is primarily a function of the availability of the various electron acceptors that may be used in the reactions as well as the presence of the appropriate microorganisms and enzymes. Oxygen is by far the most favorable electron acceptor, and BTEX degradation is relatively fast and efficient in aerobic groundwater. When DO is depleted within a contaminant plume, nitrate is the next most favorable electron acceptor, followed by manganese, ferric iron, sulfate and carbon dioxide. All these anaerobic biodegradation processes are slower than aerobic processes; benzene degradation is particularly slow when carbon dioxide is the only available electron acceptor. Manganese is not usually considered an important electron acceptor because it generally is not abundant in aquifer sediments. The biodegradation of the various longer chained hydrocarbons that make up JP-5 is a less understood process, although aerobic degradation generally remains more rapid than anaerobic degradation (United States Geological Survey [USGS] 2005).

A universal indicator of hydrocarbon biodegradation is an accumulation of the end product carbon dioxide. An indication of aerobic hydrocarbon degradation is depletion of DO within a plume. An indication of hydrocarbon degradation linked to nitrate reduction is the depletion of nitrate (relative to upgradient concentrations) and a possible accumulation of nitrite, although nitrite generally is short-lived in shallow groundwater and was not analyzed in this study. An indication of hydrocarbon degradation linked to iron reduction is the accumulation of ferrous iron. Ferrous iron is the soluble by-product of iron reduction, and the oxidized ferric iron that serves as electron acceptors is primarily in a non-soluble state associated with aquifer sediments. An indication of hydrocarbon degradation linked to sulfate reduction is the depletion of sulfate and a possible accumulation of sulfide compound, although sulfide is also generally short-lived in shallow ground water and was not analyzed for this study. Lastly, an indication of hydrocarbon degradation linked to carbon dioxide reduction is the accumulation of methane. That process, referred to as methanogenesis, is relatively inefficient and generally

does not result in an observable depletion of carbon dioxide because it is being produced by the more efficient degradation processes (USGS 2005).

Groundwater samples were collected for assessment of NAPs during the 2009 monitoring event at wells at MNA sites for the 5-year review as prescribed by the CMP, Revision 3 (Navy 2007). The samples were tested in the field for DO, ferrous iron and carbon dioxide and were submitted for laboratory analyses for dissolved methane, alkalinity and sulfate. During 2009 monitoring, the most consistent geochemical indicators for petroleum degradation observed at contaminated wells were anaerobic conditions (DO concentrations less than 1 milligram per liter [mg/L]); decreased sulfate concentrations; and increased ferrous iron, carbon dioxide and methane concentrations compared to uncontaminated groundwater. Relatively high measurements of specific conductance were observed in contaminant plumes, but they are not a unique indicator of biodegradation (USGS 2005).

Groundwater samples were also collected for assessment of NAPs during the 2013 monitoring event at Area 303 and Former Power Plant, Building T-1451. Samples were submitted for the same laboratory and field tests as those performed in 2009. NAPs were assessed at these two sites following a remedial groundwater investigation and cleanup action performed by the Navy in 2012.

For all sites where MNA is the selected remedy, natural attenuation was found to be occurring at some degree in the groundwater. An in-depth discussion of the observance of natural attenuation at individual sites is presented in their respective site discussions in Sections 7 through 25.

Evidence for hydrocarbon degradation in groundwater was evaluated by comparing the concentrations of various electron acceptors and end products in “background” groundwater (located upgradient or in nearby uncontaminated areas) to concentrations of the same compounds within and downgradient from a hydrocarbon plume. Background groundwater (well E-701) in the downtown area was observed to be generally aerobic (DO concentrations ranging 5 to 11 mg/L), with relatively low specific conductance (0.108 to 0.238 milliSiemens per centimeter [mS/cm]), essentially no ferrous iron (less than 0.01 mg/L) or methane (less than 0.0038 mg/L), relatively little sulfate (2.52 to 3.09 mg/L) and low alkalinity (about 18.9 mg/L as calcium carbonate).

One contradictory circumstance for evaluating the indicators of hydrocarbon degradation is that they also are indicative of microbial transformation of non-petroleum organic compounds that may be naturally abundant in certain settings. In a wetland area where the

water table is at or near the land surface, for example, the microbial degradation of abundant, naturally occurring organic matter in saturated surface soils results in a geochemical signature that may be indistinguishable from the signature resulting from petroleum hydrocarbon degradation (USGS 2005). Wetlands were specifically observed at SWMU 61, Tank Farm B, where wetland methanogenesis may be occurring.

The next NAPs groundwater sampling for the LTM sites is scheduled for 2014 (per Table 2-6). Therefore, 2012 groundwater parameters (DO and ORP) for these sites were evaluated for indications of biodegradation and the occurrence of natural attenuation at MNA sites and compared to the 2009 NAPs assessment. A discussion of MNA results is presented for each sites for which MNA is the selected remedy at individual sites is presented in their respective site discussions in Sections 7 through 25.

4.1.3 Visual Inspections

Visual inspections were performed at each monitoring well gauged and at each surface water and sediment sampling location. Information was recorded on the Monitoring Well and Sampling Visual Inspection Checklists that are presented in Appendix A. As appropriate, the visual inspections at surface water and sediment sampling locations were conducted at low tide along marine shorelines in accordance with the CMP, Revision 5 (Navy 2012a). Appendix E of this report includes a summary of wells found in need of repair.

Visual inspections were also performed along shorelines downgradient to eight sites: Area 303 (East Canal); Former Power Plant, Building T-1451 (East Canal); NMCB; SA 79, Main Road Pipeline; South of Runway 18-36 Area; SWMU 60, Tank Farm A; SWMU 61, Tank Farm B; and SWMU 62, New Housing Fuel Leak Area (East Canal).

Visual inspections were performed at 12 surface water and nine sediment sampling locations in water bodies on or downgradient of the following sites: Former Power Plant, Building T-1451 (East Canal); NMCB (Sweeper Cove); South of Runway 18-36 Area (South Sweeper Creek); SWMU 11, Palisades Landfill (Kuluk Bay); SWMU 25, Roberts Landfill (Mitt Lake and Mitt Creek); SWMU 60, Tank Farm A (South Sweeper Creek); SWMU 61, Tank Farm B (North Sweeper Creek); and SWMU 62, New Housing Fuel Leak Area (East Canal).

Locations of the shoreline, surface water samples and sediment samples visual inspections are presented in Table 4-4 and on sample location figures in specified site sections. Continuous stretches of shorelines were inspected downgradient of the specified sites to detect potential migration of petroleum compounds from contaminated groundwater to adjacent surface water bodies.

Visual petroleum seeps along the shoreline, odor and sheens on surface waters or sediments were recorded on the Seep and Shoreline Visual Inspection Checklists presented in Appendix A and are summarized in Table 4-4. Visual inspection information from surface water and sediment sample locations were recorded on the Surface Water Sampling and Sediment Sampling Visual Inspection Checklists also included Appendix A and in Table 4-4.

East Canal

A portion of East Canal was inspected from north of the SWMU 62, New Housing Fuel Leak Area product recovery trench (which is also downgradient of Area 303 monitoring well 03-012) to the southern-most point of the canal at the exit culverts that flow into West Canal. This stretch of shoreline encompasses three sites: Area 303, SWMU 62, New Housing Fuel Leak Area and Former Power Plant, Building T-1451. Two petroleum seeps were observed in East Canal at the SWMU 62 free product recovery trench at boom 8 and approximately 85 feet further downstream from Former Power Plant booms 9/12 (at boom 11) (Figures 7-1, 8-1 and 24-2). Water levels in East Canal were uncharacteristically high due to malfunctioning canal pumps which affected inspection observations and the ability to collect certain samples.

The largest petroleum seep affects approximately 120 feet of shoreline and is located downgradient of the SWMU 62, New Housing Fuel Leak Area free product recovery trench in Eagle Bay Housing. Booms 2, 3 and 8 are maintained monthly at this location. This seep is characterized by oily shoreline sediments and soils, pooled product which collects behind the booms, sheen on surface water, strong petroleum odors, iron staining along the shoreline and in the water and stressed vegetation where the petroleum flows to the ground surface, all of which were noted during the 2013 shoreline inspection. This area is typically dry but was inundated during the 2013 inspection due to the elevated water levels in East Canal which caused the observation of a seep/sheen here. Periodic free product recovery is currently ongoing in several upgradient wells at the SWMU 62, New Housing Fuel Leak, Eagle Bay site.

The other smaller seep is located further south downgradient of Former Power Plant, Building T-1451 and is located approximately 75 feet downgradient of boom 9/12 where boom 11 is being maintained. This seep affects approximately 40 feet of the shoreline of East Canal and has expanded past the southern end of boom 11 by 5 feet. The boom at this location was expanded to encompass the seep area. Black-stained oily sediments, moderate petroleum odor, sheen, oily sediments and stressed vegetation were observed at this seep during the 2013 inspection.

Table 4-4. 2013 Shoreline Surface Water Sample and Sediment Sample Visual Inspection Results

Site	Water Body	Shoreline Location	Observation[1]			Comments
			Seep	Odor	Sheen or Discolor	
Area 303	East Canal	From boom 8 to northern end of that section of East Canal	No	No	No	Water level in East Canal was elevated due to intermittent operation of dike pumps. Area was heavily vegetated and marshy. Biogenic sheen was observed on surface water.
Former Power Plant, Building T-1451	Eastern shoreline of East Canal	From boom 9/12 to south end of East Canal at Crossover Canal	Yes	Yes	Yes	No visible petroleum was observed at remediated shoreline at boom 9/12. Petroleum seep at boom 11 is located 85 feet south of boom 9/12 and has expanded to approximately 40 feet along the shoreline. Moderate petroleum odor, stressed vegetation, sheen on surface water and oily sediments were observed at the seep.
		Approximately 50 feet downstream of boom 11	No	Yes	Yes	Surface water/sediment sample NL-08 was collected downgradient of boom 11. Light petroleum odor and light sheen noted on water when sediment was disturbed.
NMCB Expanded Area	Sweeper Cove	Downgradient and between wells 02-451 and 02-479	No	No	No	No contamination observed.
			No	No	No	Sediment sample NL-05 was collected downgradient of well NMCB-07. No contamination observed.
SA 79, Main Road Pipeline	Sweeper Cove	From well 02-230 to mouth of South Sweeper Creek	No	No	No	No contamination observed.
South of Runway 18-36 Area	Eastern shoreline of South Sweeper Creek	Between surface water locations NSWSD-07 and NSWSD-08	No	Yes	Yes	Four areas of oil-stained sediment were observed along shoreline downgradient of site, the largest being 8 ft by 8 ft in area. Light to moderate petroleum odor was observed at these locations and sheen was observed when sediments were disturbed. Moderate petroleum odor was observed at the West Canal outfall which was discharging water approximately 100 gallons/minute. Heavy precipitation was occurring during the inspection making it easier to observe areas of oily sheen.

Table 4-4. 2013 Shoreline Surface Water Sample and Sediment Sample Visual Inspection Results (continued)

Site	Water Body	Shoreline Location	Observation[1]			Comments
			Seep	Odor	Sheen or Discolor	
South of Runway 18-36 Area (continued)	Eastern shoreline of South Sweeper Creek	Between surface water locations NSWSD-07 and NSWSD-08	No	Yes	Yes	Sediment sample NSWSD-2. Black-stained sediments with moderate petroleum odor observed at sampling location. Light sheen observed ½-inch beneath the surface.
			No	No	No	Sediment sample NSWSD-4. No visible contamination observed.
			No	Yes	Yes	Sediment sample NSWSD-5. Black sediment and moderate sheen noted when sediment was disturbed. Heavy petroleum odor noted.
			No	No	No	Surface water sample NSWSD-7. No contamination observed.
			No	No	No	Surface water sample NSWSD-8. No contamination observed.
SWMU 11, Palisades Landfill	Kuluk Bay	Unnamed stream flowing through landfill	No	No	No	Sediment sample 101S. No contamination observed.
		Unnamed stream flowing through landfill	No	No	No	Sediment sample 102S. No contamination observed.
		Marine shoreline at stream outfall	No	No	No	Sediment sample 103S. No contamination observed.
SWMU 25, Roberts Landfill	Mitt Creek	North landfill swale	No	No	No	Surface water sample RLSW01. No contamination observed, location was dry.
	Mitt Creek	West landfill swale	No	No	No	Surface water sample RLSW02. No contamination observed, location was dry.
	Mitt Creek	Unnamed perennial stream flowing down from west side of landfill into Mitt Creek	No	No	No	Surface water sample RLSW03. No contamination observed.
	Mitt Creek	Mitt Creek downstream of landfill	No	No	No	Surface water sample RLSW04. No contamination observed. Trout observed in stream.

Table 4-4. 2013 Shoreline Surface Water Sample and Sediment Sample Visual Inspection Results (continued)

Site	Water Body	Shoreline Location	Observation[1]			Comments
			Seep	Odor	Sheen or Discolor	
SWMU 25, Roberts Landfill (continued)	Mitt Lake	Unnamed perennial stream flowing down from south side of landfill into Mitt Lake	No	No	No	Surface water sample RLSW05. No contamination observed.
	Mitt Creek	Confluence of unnamed perennial stream and Mitt Creek	No	No	No	Surface water sample NL-11 downstream of RLSW03. No contamination observed.
	Mitt Creek	Mitt Creek just below the confluence of unnamed perennial stream	No	No	No	Surface water sample NL-12 downstream of RLSW03, RLSW04 and NL-11. No contamination observed.
	Ditch in Adak Fuel Farm	North side of landfill	Yes	No	Yes	Surface water sample NL-14. Groundwater seep located at northern toe of landfill with brilliant blue, green and white crystalline formations at seep emergence. Blue-green milky substance minimally seeping from upgradient hillside 4 ft above pooled water in ditch at sample location and diluting to a milky white to milky brown color. Water in the ditch was not flowing. Seep area is approximately 20 ft by 4 ft in area on hillside. Evidence of stressed vegetation noted.
SWMU 60, Tank Farm A	Western shoreline of South Sweeper Creek	Downgradient of well LC5A from mouth of South Sweeper Creek to top of lagoon	Yes	Yes	Yes	Petroleum seep was observed north and adjacent to the culvert in Sweeper Creek Lagoon (boom 10) approximately 15 ft by 5 ft in size. Oily, black sediment; moderate to heavy petroleum odor; and sheen observed at seep. A second area approximately 3 ft by 4 ft of sheen was observed inside the northern end of boom 10.

Table 4-4. 2013 Shoreline Surface Water Sample and Sediment Sample Visual Inspection Results (continued)

Site	Water Body	Shoreline Location	Observation[1]			Comments
			Seep	Odor	Sheen or Discolor	
SWMU 60, Tank Farm A (continued)			Yes	Yes	Yes	Surface water/sediment sample 852. Moderate odor of petroleum but no sheen was observed on surface water. Water was collected approximately 75 ft from sediment location due to low tide. Black sediment noted with sheen and heavy petroleum odor when disturbed.
SWMU 61, Tank Farm B	Western shoreline of North Sweeper Creek	Between surface water sample location NL-04 and confluence of unnamed creek	No	No	No	No contamination observed. Extensive wetland observed.
			No	Yes	No	Surface water/sediment sample NL-04 collected downgradient of well 14-113. No contamination observed in surface water. Light petroleum odor in sediment.
SWMU 62, New Housing Fuel Leak Area	East Canal	Between SWMU 62 free product recovery trench boom locations 8 and 9/12	Yes	Yes	Yes	Petroleum seep observed along shoreline at boom 8 downgradient of product recovery trench approximately 3 ft by 120 ft in length. Sheen, pooled petroleum, black oily sediments, iron staining, stressed vegetation and strong petroleum odors observed. East Canal water level was uncharacteristically high due to malfunctioning pumps.
			No	Yes	Yes	Surface water/sediment sample NL-09 collected downgradient of boom 8. Moderate petroleum odor and sheen observed at sample location. Sediment could not be collected due to elevated water levels in East Canal. High water levels also contributed to sheen escaping past boom.

Note:
[1] Seep, odor, sheen or discolor was noted for petroleum or other potential site-related contaminants.

In general, booms are effective in preventing the migration of sheen to downgradient surface waters; however, malfunction of the East Canal pumps and subsequent elevated water levels in East Canal are allowing sheen to escape from the booms making them less effective. This is described in further detail in the Remedial Action Summary Report, Free Product Recovery (Navy 2014).

Remedial activities were performed at a former seep location at boom 9/12 in July 2012 as part of the Navy's Petroleum Sites Program. Activities included removal of petroleum-impacted soils and replacement of approximately 100 feet of shoreline with amended clean fill. Since these activities have taken place, the flow of the petroleum seep has ceased. During the shoreline inspection in 2013, no evidence of petroleum contamination was observed at this location.

Two surface water/sediment samples were collected downgradient of the petroleum seeps in East Canal for analyses of petroleum hydrocarbons to determine the effectiveness of the booms. One sample was collected downgradient of SWMU 62, New Housing Fuel Leak Area boom location 8 (NL-09). The other sample was collected downgradient of Former Power Plant, Building T-1451 boom location 11 (NL-08). No contaminants of concern were detected above endpoint criteria in surface water or sediment collected from NL-08. DRO, GRO, TAH and TAqH were detected in surface water collected from location NL-09 at concentrations that exceeded endpoint criteria. The sediment at NL-09 could not be collected due to the elevated water levels in East Canal.

South Sweeper Creek

A shoreline inspection was performed from the mouth of South Sweeper Creek along the western shoreline to the top of Sweeper Creek lagoon. One petroleum seep is located in South Sweeper Creek on the western shoreline of the lagoon downgradient of SWMU 60, Tank Farm A, well LC5A. The area of shoreline affected by the seep is approximately 15 feet by 5 feet in area and located north and adjacent to the culvert. This seep is characterized by oily sediments, sheen on surface water and heavy petroleum odors which were noted during the shoreline inspection performed in 2013. A second area with sheen approximately 4 feet by 3 feet in area was observed inside the north end of boom 10. Boom 10 is maintained at this location to prevent migration of sheen to downgradient surface waters (Figure 22-1). Early in 2012, the culvert collapsed which resulted in the visible release of petroleum contamination from the disturbed soil.

A surface water/sediment sample was collected at the seep at location 852 and analyzed for petroleum hydrocarbons to determine if natural recovery is progressing. DRO concentrations in surface water at this location were below endpoint criteria for the second consecutive sampling event. However, DRO concentrations in sediment remained above endpoint criteria at 2,000 mg/kg but which were down compared to 10,000 mg/kg observed in 2012. Due to the minus tide, the surface water sample was collected approximately 85 feet from the seep where the sediment portion was collected. Periodic free product recovery has been performed in wells 652 and 653 onsite at SWMU 60.

In addition, a shoreline inspection was performed on the opposite (eastern) shoreline of South Sweeper Creek from the mouth of the creek to South of Runway 18-36 surface water location NSWSD-08. Oily sediments have been historically observed on the eastern shoreline of South Sweeper Creek downgradient from the South of Runway 18-36 product recovery trench. These oily sediments are approximately a quarter to a half inch below ground surface (bgs) and are not associated with an active petroleum seep. Oil-sorbent boom 6 is being maintained monthly in South Sweeper Creek to control migration of sheen from this site and from SWMU 60 to Sweeper Cove (see the Remedial Action Summary Report, Free Product Recovery [Navy 2014] for more details).

Heavy precipitation occurred during the shoreline inspection resulting in heavy surface water runoff. Four small areas of oil sheen on sediment were observed during the inspection that was likely made more visible due to the heavy rain. The four areas are:

- a 1-foot square area observed at the south end of the product interception culvert
- a 5 feet by 8 feet area observed near sediment sample location SWSD-05
- a 3 feet by 6 feet area observed just south (downstream) of the Moffett Road Bridge
- an 8-foot square area observed just upstream from the Moffett Road Bridge

Moderate petroleum odor and black-stained sediment just beneath the soil surface which released sheen when disturbed were observed at these locations. Oily sediments, petroleum sheen and odor were observed along the shoreline adjacent to South of Runway 18-36 during sediment sampling at locations NSWSD-2 and NSWSD-05 at approximately a quarter to a half inch below the sediment surface. Similar to 2012, no visible petroleum contamination was observed at NSWSD-4. However, DRO concentrations in all three of these sediment samples still exceeded endpoint criteria in 2013 but at lower concentrations than those observed in 2012. No visible contamination was observed at either surface water

sample NSWSD-07, collected at the mouth of South Sweeper Creek, or NSWSD-08, collected north and upstream of the site. Neither sample exceeded endpoint criteria.

Sweeper Cove

No visual evidence of petroleum contamination was observed during the Sweeper Cove shoreline inspection at the NMCB Expanded Area downgradient of well NMCB-07. Sediment sample NL-05 was collected at this location for analyses of DRO, GRO and benzene. None of these contaminants exceeded endpoint criteria in 2013. Periodic product recovery is being performed at this site (see Appendix J).

A shoreline inspection of Sweeper Cove was performed at site SA 79, Main Road Pipeline from well 02-230 to the mouth of South Sweeper Creek. This inspection was performed because groundwater has historically exceeded endpoint criteria in surface water protection wells 02-230 and MRP-MW8. No evidence of petroleum contamination was observed during the inspection.

North Sweeper Creek

A shoreline inspection of North Sweeper Creek was performed in 2013 downgradient of site SWMU 61, Tank Farm B between monitoring well 14-113 and the confluence with an unnamed stream approximately 100 feet to the north. No visual evidence of petroleum contamination was observed during the inspection or during sampling at location NL-04; however, a light petroleum odor was detected during the sediment sampling. No surface water exceeded endpoint criteria. No target analytes were detected in the sediment collected at NL-04, although the GRO detection limits were elevated due to the high moisture content of the sample.

Kuluk Bay

Three sediment samples (101S through 103S) were collected from an unnamed perennial stream and its outfall at SWMU 11, Palisades Landfill. The stream flows through the landfill and into Kuluk Bay (Figure 17-1). Sample 103S was collected at the outfall of the stream in the marine sediments of Kuluk Bay. No visible contamination was observed at any of these sample locations. A shoreline inspection was not required for this site. The sum of polychlorinated biphenyl (PCB) Aroclors, antimony, arsenic and nickel exceeded endpoint criteria in sediment sample 102S.

Mitt Lake/Mitt Creek

Five surface water samples were collected from Mitt Creek and unnamed perennial streams flowing from SWMU 25, Roberts Landfill into Mitt Creek and Mitt Lake. No visible contamination was observed at any of the sample locations. Aluminum and copper exceeded endpoint criteria in sample RLSW03 collected at the base of the southeastern side of the landfill. Copper also exceeded endpoint criteria in NL-04 (collected downstream of RLSW03 just before the confluence with Mitt Creek) and in RLSW05 (collected upstream of Mitt Lake) and in sample NL-11 (collected downstream of RLSW03).

A groundwater seep was observed and sampled at northern toe of SWMU 25, Roberts Landfill in the Adak Fuels Facility (Figure 20-1). The seep is approximately 20 feet by 4 feet in area and was observed to be minimally flowing from the hillside 4 feet into a roadside ditch. The seep is characterized by blue, green and white crystallization with areas of black discoloring. A concentrated blue-green tinted milky substance was observed seeping into the surface water of the ditch at the sample location NL-14 and diluting to a milky white to milky brown color. Water in the ditch was not flowing during the sampling. The surface water collected at this location exceeded endpoint criteria for aluminum and copper.

Shoreline, surface water and sediment sample visual inspections are also discussed for individual sites in Sections 7 through 25.

4.1.4 Environmental Sampling

Groundwater samples were collected from 87 monitoring wells during the sampling event. Surface water was collected from 12 locations, and sediment samples were collected from 10 locations. All samples were collected in accordance with the CMP, Revision 5 (Navy 2012a).

The purpose of monitoring at each well location is specified in Table 2-5. Groundwater samples were collected using low-flow sampling methods as outlined in NAVFAC SOP I-C-5 (Low-Flow Groundwater Purging and Sampling) and Stand-Alone Specific Instruction #4 (Low-Flow Groundwater Sampling from Shallow Wells). Well purging and sampling were conducted using a low-flow peristaltic pump. Wells were considered adequately purged when field parameters (pH, ORP, specific conductance, turbidity, DO, temperature and salinity) stabilized or when a minimum of three well casing volumes had been removed. During the 2013 field event, each well stabilized or three well casings were removed, with one exception. Well 14-210 at SWMU 61, Tank Farm B was purged dry. After several attempts to let the well recharge, the well was sampled. The 2013 analytical results in this

well is consistent with past analytical results and appears to be unaffected by the lack of stabilization and limited purging volume.

An interface probe was used to monitor the presence or absence of free product at each well sampling location before the sample collection activities were initiated. Product thickness and depth-to-groundwater were measured relative to a survey mark on the top of the well casing. If free product was measured at a thickness greater than or equal to 0.02 feet in a monitoring well scheduled for groundwater sampling, no sample was collected. Such deviations were documented on Sampling Deviation Forms (Appendix B). During the 2013 LTM field event, free product was observed in eight monitoring wells slated for sampling that equaled or exceeded 0.02 feet in thickness; therefore, samples were not collected from these wells. Free product was removed from monitoring wells if measured at greater than 0.5 feet in a 2-inch diameter well or greater than 0.1 feet in a 4-inch diameter (or larger) well. During the 2013 LTM event, 0.50 feet of product was observed in Former Power Plant, Building T-1451 well MW-1451-7 (2-inch well diameter) from which 0.1 gallons (380 milliliters) of product was recovered and managed per the Waste Management Plan (Navy 2013c). Deviations from planned sampling and field activities are discussed in greater detail in Section 5.

4.1.5 Sample Preservation and Volume Requirements

To maintain the integrity of the samples from the time they were collected until the analyses were completed, the samples were preserved by chemical addition, cooling or both at the time of collection. This process served to prevent or retard the degradation or modification of chemicals in samples.

The sample container type and volume required for each analysis are specified in the CMP, Revision 5 (Navy 2012a) and in the revised CMP Appendix A and B tables (Navy 2013a).

4.1.6 Sample Custody and Holding Time Requirements

All samples submitted to the laboratory were labeled as specified in NAVFAC SOP III-E (Record Keeping, Sample Labeling and Chain-of-Custody Procedures). Sample custody was documented by recording the sample handling history from the time a sample was collected, through all transfers of custody, until it was received at the analytical laboratory, as specified in NAVFAC SOP III-E. After collection, identification and preservation, the samples were maintained following the specified custody procedures through delivery to and analysis by the contract laboratory. Internal laboratory records then documented the custody of the sample through final disposition.

To ensure the samples collected during site investigations were traceable from the time they were collected until their derived data were used in the final report, the following sample handling and custody procedures were used:

- Sampling information was recorded in field logbooks and field data forms. This information included identifying information, such as project name, sample identification names, sample location, date, time, name of samplers and field observations.
- Samples were collected per applicable Navy SOPs and Stand-Alone Specific Instructions presented in CMP, Revision 5 (Navy 2012a). Containers were batched in lots together with documentation to indicate their integrity. Field personnel were responsible for the care and custody of the samples collected until they were properly shipped to the laboratory.

The information recorded on the sample label included the following, as appropriate: project name, field sample name, sample location, date, time, chemical analysis, preservation, sampler's initials and media.

Samples were packaged according to U.S. Department of Transportation sample preservation requirements for shipment and then dispatched to the laboratory for analysis with a chain-of-custody record accompanying each shipment. Field personnel kept a duplicate copy of the chain-of-custody record. Each individual sample container or group of sample containers were sealed with custody tape and placed in a cooler. Empty space within the cooler was filled with bubble pack or other material to prevent shifting or breakage during shipment. Sufficient "gel ice" was added to maintain required temperatures, accounting for expected shipping and transfer times. Chain-of-custody forms were enclosed in sealed waterproof plastic bags in each cooler, which was then sealed with custody tape. The sampler or designated sample packager initialed and dated the seals. Because airline inspectors may break the cooler seals, sample containers (or groups of sample containers) were individually wrapped to maintain the security of the samples. All samples shipped to a laboratory were shipped by the most expeditious means (e.g., the next off-island flight). Preservation, shipping and holding times were coordinated with flights to meet the method-specific requirements.

Upon receipt at the laboratory, cooler temperatures were within the acceptance range of 2ºC to 6ºC or slightly lower. Some temperatures were below 2ºC; however, data quality is not adversely impacted by temperatures below 2ºC. A few sample containers did freeze and

break due to low temperatures, but sufficient unbroken containers were available to perform the required analyses (extra sample containers were provided to the laboratory in case of breakage during shipping). Thus, no required sample analyses were lost due to breakage or compromised due to temperature exceedance.

Samples were prepared and analyzed within holding times, with an exception for one re-extracted sample and its corresponding matrix spike/matrix spike duplicate (MS/MSD). The sediment sample collected from location NSWSD-4 at South of Runway 18-36 Area on September 2, 2013, was originally extracted and analyzed within the applicable holding times. A valid, usable result was obtained for all target analytes. No MS/MSD was planned at this location. However, when a planned MS/MSD for DRO and PAHs could not be collected at another location (NL-09 at SWMU 62, New Housing Fuel Leak, Eagle Bay Housing Complex as discussed in Section 5), the planned sediment MS/MSD at NL-09 was switched to NSWSD-4 in order to meet the project frequency requirement for MS/MSD analysis. The MS/MSD for NSWSD-4 was requested on September 18, 2013 approximately 16 days after the sample was collected (when sediment location NL-09 was not accessible). Thus, the laboratory re-extracted remaining sample material from NSWSD-4 and performed an MS/MSD set using the same material. The extraction was performed 2 days past the 14-day holding time for PAHs and 7 days past the 14-day holding time for DRO. The missed hold times did not appear to affect sample results, which were relatively consistent with the original analyses performed within the holding times. The holding time exceedances were assessed during third-party data validation by Laboratory Data Consultants (located in Carlsbad, California) and discussed in the applicable data validation report provided in Appendix F. The reported data for the original sample was appropriately not qualified. In order to reduce the data set to one usable result for each target analyte, the result from the re-extraction was rejected in lieu of the original result. All other samples were prepared and analyzed within holding times.

4.2 ANALYTICAL METHODS

The laboratory analyses were performed in accordance with applicable EPA or ADEC approved methods. Routine procedures used for measuring precision and accuracy include analyses of quality control (QC) samples including field duplicate samples, MS/MSD sets and trip blanks. Laboratory QC checks were the responsibility of the contracted laboratory. Environmental and QC samples collected during the field program were sent to ALS Environmental in Kelso, Washington for quantitative analyses. A summary of chemical analyses used by sample location is presented in Tables 4-2 and 4-3.

To achieve compliance sampling requirements at some sites, TAH and TAqH analyses were performed as specified in the CMP, Revision 5 (Navy 2012a). Calculation of TAH included the analysis of BTEX by EPA Method 8260C and summing the results. When one or more compounds were detected, TAH was calculated by summing the detections (the number zero was used for undetected compounds). When no detections for BTEX were reported, TAH was calculated by summing the detection limits. Calculation of TAqH included analysis of 16 PAHs by EPA Method 8270D Selected Ion Monitoring (SIM) and BTEX by EPA Method 8260C. The sum of these results was used to calculate the TAqH results reported. When one or more compounds were detected, TAqH was calculated by summing the detections (the number zero was used for undetected compounds). When no detections for individual compounds were reported, TAqH was calculated by summing the detection limits.

4.3 INVESTIGATION-DERIVED WASTE

IDW generated during the field investigation (e.g., equipment-decontamination fluids, well purge water and miscellaneous wastes) was handled according to the Final Waste Management Plan (Navy 2013c). Approximately 12 gallons of non-regulated purge water (from non-CERCLA sites) was filtered through a granulated activated carbon filter and was sampled (sample IDW-PETRO-A-2013) for petroleum site contaminants of concern. Similarly, approximately 25 gallons of purge water from non-landfill CERCLA sites was filtered through a granulated activated carbon filter and sampled (sample IDW-CERCLA-A-2013) for toxicity characteristic leaching procedure (TCLP) compounds and CERCLA site contaminants of concern. All IDW purge water was stored in properly labeled 55-gallon drums within secondary containment at the storage bunker as per the Final Waste Management Plan (Navy 2013c), pending analysis and disposal.

Analytical results from samples IDW-PETRO-A-2013 and IDW-CERCLA-A-2013 (included in Appendix F) showed that all contaminants of concern were below hazardous waste criteria and endpoint criteria. The purge water was then discharged to the ground at CERCLA/petroleum site SWMU 17, Power Plant No. 3 Area as per the Final Waste Management Plan (Navy 2013c).

5 DEVIATIONS

Based on the requirements of the CMP, Revision 5 (Navy 2012a) and the revised CMP Appendix A and B tables (Navy 2013a), the following deviations occurred during the 2013 monitoring event. Sampling Deviation Forms and Field Change Request Forms are provided in Appendix B.

Because of the presence of free product in the well was equal to or greater than 0.02 feet in thickness, the following eight monitoring wells were not sampled as scheduled:

- Area 303, well MW-303-28
- Former Power Plant, Building T-1451, wells MW-1451-7 and MW-1451-9
- NMCB Building T-1416, wells NMCB-07, NMCB-10 and NMCB-11
- SWMU 60, Tank Farm A, wells 652 and 653

The MS/MSD for GRO scheduled to be collected at well NMCB-11 was instead collected at NMCB well 02-451 and the field duplicate scheduled to be collected at Area 303 well MW-303-28 was collected instead at Area 303 well 03-107.

Three samples could not be collected because the sampling location was dry. This occurred at the following monitoring well and two surface water sampling locations:

- Area 303, well MW-303-41
- SWMU 25 Roberts Landfill, surface water sample locations RLSW01 and RLSW02

The MS/MSD for sulfate, methane and alkalinity scheduled to be collected at well MW-303-41 was instead collected at Area 303 well MW-303-42.

At Former Power Plant, Building T-1451, well MW-1451-2 required resampling due to incorrect sampling procedures. Resampling occurred and was not considered a deviation, but the field duplicate for NAPs test kit parameters which was scheduled to be collected at this location was instead collected at Area 303 well MW-303-42.

During collection of groundwater sample at Former Power Plant, Building T-1451 well MW-1451-8, field water quality parameters stabilized prior to sample collection as required but the pH measurement was suspiciously low. After sample collection, a second properly functioning water quality meter was used to validate the field measurements. The post-

sampling field measurements were deemed to be the most valid and reported on the field forms and in this report.

Sediment sample NL-09 was not collected along the shoreline of East Canal downgradient of the SWMU 62, New Housing Fuel Leak Area recovery trench because water level in the canal were elevated above the sampling location and prevented access to the location. An MS/MSD was slated to be collected at this location for all parameters but was instead collected on other sediment samples.

For the sediment sample, field duplicate and MS/MSD collected at SWMU 60, Tank Farm B NL-04 location on 9/06/13, the laboratory performed analysis for GRO using incorrect sample containers which did not contain a surrogate compound. This sample aliquot for GRO was then recollected on 10/25/13 and submitted for analysis to obtain valid analytical data.

One Field Change Request was submitted to amend the revised CMP Appendix A tables (Navy 2013a), which was approved by the Navy. The Field Change Request clarified that BTEX analysis would not be performed at well 03-502 at SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing Complex per the recommendations in the 2012 Final Annual Groundwater Monitoring Report (Navy, 2013b).

6 DATA QUALITY ASSESSMENT

The quality of laboratory and field data is discussed in this section. Data quality goals are specified in the CMP, Revision 5 (Navy 2012a) and the revised CMP tables (Navy 2013a). Evaluation of field effort compliance with data quality goals was accomplished by assessing the precision, accuracy and completeness of the field effort and the comparability and representativeness of the data. Data quality goals were met for the 2013 monitoring event and are discussed in the following subsections.

6.1 QUALITY ASSURANCE/QUALITY CONTROL

Quality assurance (QA) and QC activities were implemented throughout the planning, implementation, assessment and reporting processes to ensure that environmental data of known and acceptable quality were provided to meet the requirements and objectives of the CMP. These activities are defined as follows:

- QA – An integrated system of management activities involving planning, implementation, assessment, reporting and improvement to ensure that an item, process or service is of the type and quality needed. This system includes development of plans, training of personnel, implementation of applicable procedures, documentation of field and analytical processes, and assessment of final products by independent objective sources.
- QC – An overall system of technical activities that measures the performance of a process, item or service against defined standards to verify that performance meets the stated requirements. This system includes field measurement, field and laboratory QC samples and third-party review.

6.1.1 Quality Assurance

The following QA activities were performed to ensure project requirements were met:

- Current and applicable plans and procedures were available and used by field personnel.
- Project personnel received adequate indoctrination and training on procedures and protocols for sample collection, sample custody, sample shipment, laboratory analysis, data review and final reporting.

- All activities, findings and results were documented, defensible and consistent with the data quality requirements.
- Changes to contractual or CMP requirements followed project procedures, with significant changes to be noted in the final document, and with appropriate justification and assessment of the potential or real impacts on the results.

Level 4, third-party validation was performed by Laboratory Data Consultants in Carlsbad, California on the analytical data packages associated with LTM samples generated by the laboratory. The validation was performed to verify that data quality was acceptable. Data validation reports, including qualified sample results, are presented in Appendix F. The requirement for an additional Laboratory Data Review Checklist was waived by ADEC for LTM data for this project.

For waste characterization samples, the data generated by the laboratory was reviewed by Laboratory Data Consultants. A Laboratory Data Review Checklist was completed is provided in Appendix F.

6.1.2 Quality Control

The following QC activities were performed to ensure data were usable and defensible for the intended use:

- Field measurements (parameters) were used to ensure that appropriate groundwater samples were obtained.
- Field QC samples were collected at the appropriate frequency to ensure field procedures were properly performed and to determine field and laboratory conditions that could influence data quality including trip blanks, field duplicates and MS/MSDs.
- Review of documentation was performed for accuracy and completeness of records.
- Laboratory QC samples were used to measure analytical data quality.

6.1.3 Field Quality Control Samples

QC samples are necessary for evaluating the field precision, accuracy, representativeness and comparability of the data. The three types of QC samples analyzed for this project were field duplicates, trip blanks and MS/MSDs. Each field duplicate and MS/MSD was collected in the field at the same time the environmental sample was collected. The analytical laboratory provided the trip blanks.

For every 20 samples taken, one duplicate sample was collected and submitted for laboratory analysis. The duplicate samples were intended to be identical to the original sample and are used to gain field precision information on homogeneity, handling, shipping, storage, preparation and analysis. Duplicate sampling was used to identify possible field and laboratory variations or errors. Each duplicate sample was collected at the same time and location as the corresponding environmental sample.

For every 20 samples taken, one MS/MSD triple-volume sample was collected and submitted to the laboratory. The MS/MSD samples were used to evaluate analysis bias or interferences that may have occurred due to the sample matrix.

Water trip blanks were prepared by the laboratory with analyte-free water and accompanied groundwater and surface water sample aliquots designated for volatile constituents during storage and shipment back to the laboratory. Sediment trip blanks were prepared with methanol and accompanied sediment samples for volatile constituents during storage and shipment back to the laboratory. One trip blank accompanied each cooler containing samples submitted for GRO, VOC and BTEX analyses. Trip blanks are used to assess possible sources of erroneous contamination from packing, shipping and storage.

The CMP, Revision 5 (Navy 2012a) specifies that field duplicates and MS/MSDs be collected at a rate of one for every 20 environmental samples (5 percent). Field duplicate and MS/MSD samples were collected for every analytical parameter at a rate equal to or greater than one for every 20 environmental samples (greater than 5 percent), which met the specified objective of 5 percent. All field duplicate and MS/MSD samples that were collected were analyzed as requested.

6.2 PRECISION

Precision is a measure of the agreement among replicate, duplicate, or collocated sample measurements of the same analyte. The closer the numerical values of the measurement are to each other, the more precise the measurement. Precision examines the spread of data about the mean. The spread shows how different the individual reported values are from the average reported value. Precision is a measure of the magnitude of errors and is expressed as relative percent difference (RPD). Therefore, the lower the RPD value, the more precise the data.

RPD is calculated as follows:

$$\text{RPD} = \frac{(\text{SR} - \text{DS})}{[(\text{SR} + \text{DS}) / 2]} \times 100$$

Where: SR – sample result
DS – duplicate sample result

The project objective for precision was to meet requirements specified in the CMP and analytical methods. Precision was evaluated during third-party data validation by examining results for field duplicate sets, MS/MSD sets, sample/matrix duplicate results and laboratory control sample/laboratory control sample duplicate sets.

Precision was assessed during the independent data validation. Data validation reports are provided in Appendix F. The overall precision of the data for this project was determined to have met the acceptance criteria.

The RPD values for environmental samples and field duplicate samples are also used to evaluate the precision of the field sampling program. In this case, the RPD values were calculated for those analyte pairs (primary sample and duplicate) for which results were detected. If one or both of the analyte pair results were qualified as not detected (U), then an RPD was not calculated for that particular analyte.

The field duplicate results for the groundwater and surface water samples are provided in Appendix G, Table G-1; the field duplicate results for sediment samples are provided in Appendix G, Table G-2. The RPD values for detected analytes are also summarized in these tables and compared to the criterion of 50 percent specified in the CMP, Revision 5 (Navy 2012a). As shown in Tables G-1 and G-2 of Appendix G, the RPD values for 15 paired data points for the field duplicate sets were greater than the criteria. In all cases, the RPD values greater than the 50 percent criterion were associated with sediment samples, which typically exhibit higher RPD values due to its heterogeneous nature. For the remaining 163 paired data points summarized in the two tables, no RPD exceedances were observed. Assessment of the field duplicate results indicates that the overall field sampling program has met the requirement for precision.

6.3 ACCURACY

Accuracy is a measure of bias in a measurement system that indicates a random or systematic error of an analytical method. Examples of bias include contamination and errors made in sample collection, preservation, handling or analysis. Accuracy is also assessed by the collection of trip blanks and by the use of known and unknown QC samples. The more closely the value of the measurement agrees with the true value, the more accurate the measurement. Accuracy is expressed as the percent recovery (PR) of an analyte such as a surrogate, blank spike (or laboratory control sample) or matrix spike. Surrogate, blank spike and matrix spike

recoveries are calculated by the laboratory and reported on standard forms for comparison. The closer the value is to 100 percent, the more accurate the data.

Accuracy for QC samples is often measured as PR, which is calculated as follows:

$$PR = \frac{SSR - SR}{SAA} \times 100$$

Where: SSR – spike sample result
SR – sample (unspiked) result
SAA – spike amount added

The project objective for accuracy is to meet requirements specified in the CMP and analytical methods.

Accuracy was evaluated during third-party data validation by examining PR for matrix spikes, laboratory control samples and surrogate compounds as well as by reviewing sample receipt conditions and items such as results for trip and method blanks. A small percentage of the 2013 analytical results were qualified as “estimated” or “not detected” because of exceedances of accuracy criteria, such as recoveries outside the specified criteria, or trace contamination observed in the trip and method blanks; however, the overall effect on the accuracy goals for the entire sampling event was negligible. The overall accuracy of the data for this project was determined to have met the acceptance criteria specified in the CMP and analytical methods.

6.4 COMPLETENESS

Completeness is a comparison of the number of valid measurements obtained relative to the total number of measurements planned. The closer the numbers, the more complete the measurement process. The completeness goal for the project is greater than 95 percent.

Analytical completeness is a comparison of the number of valid (usable) measurements obtained relative to the total number of planned measurements. During 2013, data for samples that were collected and submitted for laboratory analysis were validated by a third-party validation firm. One sample was analyzed more than once for three analytes. In these cases, the validation firm selected a preferable result for each analyte and rejected the less preferable result. A usable result for each analyte was obtained for each sample. Therefore, analytical completeness for the project was 100 percent.

Overall completeness can be influenced by factors such as ability to collect a valid sample or environmental conditions (e.g., presence or absence of free product). During the 2013

monitoring event, eight wells were not sampled because of the presence of floating free product. The CMP specifies that groundwater samples not be collected from wells where free product is observed on the groundwater surface at a thickness of 0.02 feet or greater. A second factor impacting overall completeness was identified for surface water and groundwater. At two surface water locations, RLSW01 and RLSW02 at SWMU 25, Roberts Landfill no samples were collected because the locations were dry. At well MW-303-41 at Area 303, no groundwater samples were collected because the well was dry. Finally, sediment could not be collected at NL-09 at SWMU 62, New Housing Fuel Leak, Eagle Bay Housing because the sediment location was flooded and not accessible.

Overall completeness for the 2013 groundwater sampling program for each analytical method per site is summarized in Appendix G, Table G-3 for groundwater sites (non-landfill) and Table G-4 for landfill sites. Completeness for some parameters for some sites was less than the project-specific QC goal of 95 percent. However, usable information (i.e., whether free product in a well was present or absent, or whether visual contamination at two surface water and one sediment location was present or absent) was obtained at 11 locations that were not sampled. Thus, completeness did not significantly impact data quality.

Per the data validation reports (Appendix F), the 2013 data met the quality goals established in the CMP, Revision 5 (Navy 2012a) and the revised CMP tables (Navy 2013a). These data (as qualified) are usable for monitoring purposes.

6.5 COMPARABILITY

Comparability is a qualitative parameter that expresses the confidence with which one data set can be compared to another. The comparability goal is achieved by following SOPs to collect and analyze representative samples, report analytical results in appropriate and consistent units and establish consistent reporting limits. The goal is also achieved by maintaining consistency in sampling conditions, selection of sampling procedures, sample preservation and analytical methods. Complete documentation on field data collection supports the assessment of comparability. Historical comparability is achieved through consistent use of methods and documentation procedures throughout the project.

Planned sample collection and handling techniques were consistently used to maintain comparable representativeness of all collected samples. Consistent sampling procedures and analytical methods were used. Consistent sample preservation techniques were used to the maximum extent practicable. Samples were collected in the same proximity (within a few feet) as historic samples at the same location, with one exception. The surface water samples

collected in 2012 and 2013 from location 852 at SWMU 60, Tank Farm A were collected approximately 75 feet from the historic 852 location. As discussed in Section 22.1, this was due to the lack of surface water present during low tide caused by a culvert collapse in 2012. The location should be taken into consideration when comparing and evaluating the sample results presented in Table 22-4. A recommendation has been made to collect the surface water sample 852 on an ebbing high tide within 10 feet of the sediment sampling location to provide better comparison to past samples rather than at the prescribed low tide.

Laboratory-reported analytical results were provided in appropriate and consistent units with the appropriate method detection limit and quantitation limit. The detection limits provided by the laboratory met the goal to be less than the specified endpoint criteria, with a few exceptions. The exceptions were the GRO detection limit for the sediment samples collected at location NL-04 at SWMU 61, Tank Farm B which is greater than the endpoint criteria due to high water content in the samples and mercury detection limits for the surface water samples collected at locations RLSW03, RLSW04, RLSW05, NL-11, NL-12 and NL-14 at SWMU 25, Roberts Landfill.

6.6 REPRESENTATIVENESS

Representativeness is a qualitative parameter that expresses the degree to which sample data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point or an environmental condition. The design and rationale of the sampling program, which ensured that environmental conditions were sufficiently represented, included the purpose of sampling, selection of sampling locations, number of samples to be collected, ambient conditions for sample collection, frequencies and timing of sampling and sampling techniques. Sampling locations were selected to represent the range of environmental conditions observed. An adequate number of samples were collected during the 2013 LTM field event.

While performing Level 4 validations, representativeness was evaluated, in part, by examining the sample receipt documentation (indicating conditions of samples upon receipt at the laboratory) and chain-of-custody forms (in order to determine whether the sample analyses were performed within the specified holding time). No significant receipt issues were identified during data validation. With the exception of one re-extracted sample for three target analytes (DRO, 2-methylnaphthalene and phenanthrene) as discussed in Section 4.1.6, all samples were analyzed within the applicable holding times. As indicated in the validation reports provided in Appendix F, all data were found to be acceptable, as qualified, and the quality goals for representativeness were considered to be met.

7 AREA 303

This section presents the results of groundwater monitoring performed at the Area 303 site during 2013. The remedy selected for this site is MNA, ICs and free-product recovery pursuant to a groundwater investigation performed in 2012 and according to the Final Technical Memorandum for the Long-Term Monitoring Program for Area 303 (Navy 2012b). To comply with requirements specified for this remedy, the Navy conducts periodic groundwater sampling and water level/product thickness monitoring as specified in the CMP, Revision 5 (Navy 2012a). Groundwater samples are collected from these wells to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345), to verify that natural attenuation is occurring and to monitor for surface water protection.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, an interpretation of groundwater flow direction based on groundwater levels, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, conclusions based on these analyses and recommendations for future monitoring activities at the site.

7.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at 17 monitoring wells on August 28, 2013. Table 7-1 provides the measured depths-to-water, calculated groundwater elevations and if present product thicknesses. Figure 7-1 shows the location of the monitoring wells relative to potential source areas at Area 303 such as fuel lines, the site topography, the interpreted potentiometric surface and groundwater flow direction and the downgradient surface water body (East Canal of the airport ditch system). The water level data indicate that the direction of groundwater flow is to the west, toward East Canal.

Fifteen monitoring wells were sampled between August 27 and 30, 2013. Monitoring well MW-303-28 was not sampled because 0.02 feet or greater of free product was present. Monitoring well MW-303-41 was not sampled as planned because it was dry. Five wells (03-012, 03-107, MW-303-30, MW-303-42 and MRP-MW2) did not stabilize, which required three casing volumes of groundwater be removed from each well prior to sampling per CMP, Revision 5 (Navy 2012a). Field measurements were recorded on field forms and logbooks during monitoring well sampling activities (Appendix A). Table 7-1 lists the final field measurements recorded at each monitoring well prior to sample collection.

Table 7-1. 2013 Field Measurements for Area 303

	Physical Measurements				Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
Groundwater Samples											
03-012	9.27	7.41	1.86	0	5.46	0.128	0.0	3.84	11.19	0.00	288
03-107	31.30	27.61	3.69	0	6.22	0.209	5	0.66	11.71	0.00	-5
04-211	28.45	24.08	4.37	0	6.07	0.312	0.2	0.00	7.80	0.01	-61
MRP-MW2	26.99	21.69	5.30	0	6.24	0.275	2	0.00	9.40	0.00	-24
MW-303-28	32.83	28.49[2]	4.34	0.07	FP	FP	FP	FP	FP	FP	FP
MW-303-30	31.20	27.58[2]	3.62	0.01	6.14	0.495	49.9	0.00	8.05	0.00	-89
MW-303-31	31.82	27.70	4.12	0	5.63	0.135	0.0	0.00	7.31	0.01	-33
MW-303-32	29.16	24.54	4.62	0	5.95	0.269	0.0	0.00	7.01	0.01	-88
MW-303-33	27.18[1]	22.92	4.26	0	5.99	0.263	52.2	5.02	9.57	0.01	-42
MW-303-37	16.23	13.07	3.16	0	5.53	0.105	0.0	5.74	10.17	0.00	164
MW-303-38	27.68	25.40	2.28	0	5.53	0.096	0.0	1.28	8.18	0.00	72
MW-303-39	23.43	21.41	2.02	0	5.99	0.205	0.0	6.40	7.44	0.00	105
MW-303-40	17.68	6.96	10.72	0	5.95	0.348	9.9	0.00	9.77	0.00	48
MW-303-41	30.73	Dry	NC	NC	NC	NC	NC	NC	NC	NC	NC
MW-303-42	32.13	28.94[2]	1.78	0.01	6.20	0.272	11	1.01	8.32	0.00	59
MW-303-43	32.50	29.01	3.49	0	5.47	0.335	1.1	0.00	8.31	0.00	80
MW-303-44	32.91	29.54	3.37	0	5.83	0.387	5.4	0.00	8.02	0.00	11

Notes:
[1] New casing elevation because well was repaired in 2013.
[2] Corrected for presence of product in the well.
The reported casing elevation is the surveyed elevation residing in the Naval Installation Restoration Information Solution (NIRIS) database.
The last groundwater parameter measurement prior to sample collection is reported.

Area 303 overlaps with two other established MNA sites: SWMU 62 New Housing Fuel Leak Area both to the north in Sandy Cove Housing Area and to the south in Eagle Bay Housing Area and the GCI Compound site (Figures 7-1 and 7-2) which Area 303 totally encompasses. These wells were included in the analysis of Area 303. Samples collected from well MRP-MW2 were also used to evaluate groundwater concentrations at SWMU 62, New Housing Fuel Leak Area, Sandy Cove Housing. Well 03-107 was previously also part of SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing and well 04-211 is also part of GCI Compound.

Free product was observed in monitoring wells MW-303-28 (0.07 feet), MW-303-30 (0.01 feet) and MW-303-42 (0.01 feet) during the annual 2013 LTM field event. Periodic free product recovery activities were performed at this site from June 2013 through September 2013. Approximately 0.22 gallons of free product were recovered from one well, MW-303-28, during this time period (see Appendix J). Product recovered from this well resembled avgas as evidenced by a bright blue color, strong gasoline odor and elevated photoionization detector readings. Free product recovery operation and maintenance activities are summarized in the Remedial Action Summary Report, Free Product Recovery (Navy 2014).

The northeastern shoreline of East Canal was inspected from the north end of boom 8 south to the first culvert (Figure 7-1). This shoreline is directly downgradient of surface water protection wells 03-012 and MW-303-37 and is heavily vegetated and marshy with minimal water. Biogenic sheen was observed on the surface water in the marshy area. One petroleum shoreline seep is located in East Canal downgradient of the SWMU 62, New Housing Fuel Leak Area recovery trench. Sorbent booms (boom locations 2, 3 and 8) which are maintained monthly have been placed at and downstream of the seep to prevent the migration of sheen downstream. Visible evidence of petroleum contamination was not observed north of boom 8 that could be attributed to the SWMU 62 seep. The water level in East Canal was uncharacteristically high due to the malfunctioning and intermittent operation of the canal pumps.

7.2 TARGET ANALYTE RESULTS

The groundwater samples collected from all fifteen monitoring wells were analyzed for GRO. Samples from six wells were also analyzed for total and dissolved lead. Samples from four wells were also analyzed for benzene. Samples from five wells were also analyzed for BTEX and dibenz(a,h)anthracene. Samples from three wells were also analyzed for DRO.

And samples from two surface water protection wells 03-012 and MW-303-37 were analyzed for BTEX and PAHs for the calculation of TAH and TAqH. All groundwater samples were also analyzed for natural attenuation parameters (NAPs) which are discussed in Section 7.3.

Figure 7-2 shows the sampling locations and the analytical results that exceed the applicable endpoint criteria. Table 7-2 presents groundwater results for the 2013 sampling event. The analytical results obtained for these locations from 2013 are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

GRO was detected above the endpoint criteria of 2,200 µg/L in groundwater collected from eight of fifteen wells sampled ranging from 3,000 µg/L (at well 04-211) to 16,000 µg/L (at well MW-303-30). Benzene was detected above the endpoint criteria of 5 µg/L in wells MRP-MW2 (94 µg/L) and MW-303-38 (6.0 µg/L). Toluene, ethylbenzene and dibenz(a,h)anthracene did not exceed endpoint criteria in any well sampled for these target analytes.

Total and dissolved lead were only detected above the endpoint criteria of 15 µg/L in groundwater from wells MW-303-30 (29.1 µg/L and 29.0 µg/L, respectively) and MW-303-38 (at 18.3 µg/L and 17.7 µg/L, respectively).

TAH and TAqH were calculated for samples collected from two surface water protection wells 03-012 and MW-303-37. TAH and TAqH were detected above their respective endpoint criteria of 10 µg/L and 15 µg/L, respectively in well MW-303-37 at concentrations of 138 µg/L and 139 µg/L, respectively. TAH and TAqH did not exceed endpoint criteria in surface water protection well 03-012 which is located in closest proximity upgradient of East Canal (Figure 7-2).

DRO was detected above the endpoint criteria of 1,500 µg/L in groundwater collected from well MW-303-32 (2,100 µg/L).

Table 7-2. 2013 Analytical Results for Petroleum-Related Chemicals at Area 303

Well Location	DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Dibenz(a,h) anthracene (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
03-012 Surface Water Protection	16 J	100 U	0.50 U	0.50 U	0.50 U	NP	2.5 U	0.08	NP	NP
03-107 Plume Source Area	NP	**6,100 Y**	2.8 D	NP	NP	NP	NP	NP	14.7	14.8
04-211[3] Plume Source Area	NP	**3,000 Y**	NP	NP	NP	NP	NP	NP	NP	NP
MRP-MW2[4] Plume Source Area	1,300[5] L	**5,900 Y**	**94 D**	6.1[5] D	310[5] D	NP	NP	NP	1.93	1.74
MW-303-28 Plume Source Area	NP	**FP**	NP	NP	NP	NP	NP	NP	FP	FP
MW-303-30 Plume Source Area	NP	**16,000 DY**	1.4 JD	330 D	1,100 D	0.019 U	NP	NP	**29.1**	**29.0**
MW-303-31 Plume Source Area	NP	810 Y	0.15 J	0.50 U	0.50 U	0.020 U	NP	NP	3.08	2.97
MW-303-32 Plume Source Area	**2,100 L**	1,900 Y	4.6 D	NP	NP	NP	NP	NP	NP	NP
MW-303-33 Plume Source Area	NP	70 J	0.10 J	NP	NP	NP	NP	NP	NP	NP
MW-303-37 Surface Water Protection	300 L	690 Y	0.070 J	22	49	NP	**138 J**	**139 JX**	NP	NP
MW-303-38 Plume Source Area	NP	**4,400 Y**	**6.0**	3.8	0.77	0.021 U	NP	NP	**18.3**	**17.7**
MW-303-39 Plume Edge	NP	1,100 Y	0.50 UJ	0.070 J	2.6 J	0.020 U	NP	NP	7.03	8.07
MW-303-40 Plume Edge	NP	550 Y	0.50 U	0.060 J	1.5	0.020 U	NP	NP	2.40	2.43
MW-303-41 Plume Edge	NP	NC	NC	NC	NC	NC	NP	NP	NC	NC
MW-303-42 Plume Source Area	NP	**18,000 DY**	0.92	NP	NP	NP	NP	NP	NP	NP
Endpoint Criteria	1,500	2,200	5	1,000	1,800	0.12	10[6]	15[6]	15	15

Table 7-2. 2013 Analytical Results for Petroleum-Related Chemicals at Area 303 (continued)

Well Location	DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Dibenz(a,h) anthracene (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-303-43 Plume Source Area	NP	**3,500 Y**	NP	NP	NP	NP	NP	NP	NP	NP
MW-303-44 Plume Source Area	NP	**3,800 Y**	NP	NP	NP	NP	NP	NP	NP	NP
Endpoint Criteria	1,500	2,200	5	1,000	1,800	0.12	10[6]	15[6]	15	15

Notes:
[1] TAH results were calculated by summing the detected concentrations of BTEX when one or more were detected and by summing the quantitation limits when none were detected.
[2] TAqH results were calculated by summing the detections of BTEX and 16 PAHs when one or more were detected and by summing the quantitation limits when none were detected.
[3]Also monitored at GCI Compound for product thickness.
[4]Also sampled as a SWMU 62, New Housing Fuel leak Area well.
[5] Analytes were not part of SWMU 62, New Housing Fuel Leak Area sampling program but required for Area 303.
[6] The TAH and TAqH endpoint criteria are based on ADEC water quality standards as specified in 18 AAC 70.
Bold indicates reported concentration is greater than the endpoint criteria or water quality standard.

7.3 MONITORED NATURAL ATTENUATION

The CMP, Revision 5 (Navy 2012a), required collection of NAPs at Area 303 wells during the 2013 monitoring event. Both laboratory analytical and field test kit results are presented in Table 7-3. NAPs data from well E-701 was used to represent background conditions in the following natural attenuation discussion. The occurrence of aerobic digestion is evidenced by the elevated CO_2 concentrations in plume wells (ranging up to 150 mg/L) compared to the background well E-701 (11 mg/L). The current onsite anaerobic conditions are shown by the depleted DO concentrations (0.00 mg/L) compared to the background concentration of 5 mg/L. The alkalinity concentrations are also higher in site wells (up to 127 mg/L) than background (25.2 mg/L).

Table 7-3. 2013 Analytical and Field Measurement Data for NAPs for Area 303

		Laboratory-Reported Results			Field Test Kit Results		
Well Location	**Monitoring Purpose**	**Alkalinity SM 2320B (mg/L)**	**Sulfate 300.0 (mg/L)**	**Dissolved Methane RSK175 (µg/L)**	**Carbon Dioxide[1] (mg/L)**	**Ferrous Iron[2] (mg/L)**	**Dissolved Oxygen[3] (mg/L)**
03-012	MNA	22.0 U	1.92	1.3 U	21	0	4
03-107	MNA	48.9	0.20 U	610	13	25	0.15
04-211	MNA	127	0.20 U	4,700	50	30	0.5
MRP-MW2	MNA	75.6	1.40	1,700	11	40	0.05
MW-303-28	MNA	FP	FP	FP	FP	FP	FP
MW-303-30	MNA	55.3	0.20 U	250	150	20	0.05
MW-303-31	MNA	54.8	1.28	380	32	2	1.5
MW-303-32	MNA	77.8	1.67	4,900	75	75	0.00
MW-303-33	MNA	73.4	0.15 J	7,500	100	65	0.00
MW-303-37	MNA	23.5 U	4.28	5.8	17	0	5.5
MW-303-38	MNA	36.3	0.86	180	20	2.0	1.5
MW-303-39	MNA	65.5	0.16 J	2,000	20	30	5
MW-303-40	MNA	49.3	3.75	180	25	2.0	1.0
MW-303-41	MNA	NC	NC	NC	NC	NC	NC
MW-303-42	MNA	96.6	2.89	52	13	25	0.7
MW-303-43	MNA	46.1	6.02	0.64 J	60	0.6	2.0
MW-303-44	MNA	60.4	6.69	1.3 U	45	2.0	1.0
E-701	Background	25.2 U	3.09	1.3 U	11	0	5

Notes:
[1] Field test kit, CHEMetrics K-1910 and K-1920
[2] Field test kit, CHEMetrics K-6210
[3] Field test kit, CHEMetrics K-7501 and K-7512

Sulfate concentrations (less than 0.20 mg/L) for several wells within the contaminant plume are depleted compared to background (3.09 mg/L), indicating sulfate reduction is occurring at the site. Onsite ferrous iron concentrations (up to 75 mg/L) are elevated in wells within the contaminant plume compared to background (0 mg/L), indicating the occurrence of iron reduction. Finally, methanogenesis is observed at Area 303, as demonstrated by elevated methane concentrations in plume wells. Methane was not detected in the background well (25.5 U mg/L), while plume wells had concentrations up to 7,500 µg/L.

These combined data indicate that anaerobic biodegradation of petroleum hydrocarbons is likely occurring by iron (II) reduction, sulfate reduction and methanogenesis, which demonstrates natural attenuation of petroleum contamination is occurring at the site. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

7.4 TREND EVALUATION

Statistical trend evaluations for target analyte concentrations in groundwater were not conducted at this site in 2013 since a minimum number of four data points is required in accordance with the CMP, Revision 5 (Navy 2012a).

7.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring performed at the Area 303 site in 2013. The conclusions are as follows:

- Groundwater Flow: The potentiometric surface interprets groundwater flow direction at the site is to the west, toward East Canal.
- MNA: The natural attenuation parameters obtained during the 2013 LTM event provides strong evidence that natural attenuation of petroleum hydrocarbons is occurring at the site by iron (II) reduction, sulfate reduction and methanogenesis.
- Free product was detected in three wells at this site in 2013: MW-303-28 (0.07 feet), MW-303-30 (0.01 feet) and MW-303-42 (0.01 feet). A total of 0.22 gallons of free product was recovered from the site from June 2013 through September 2013 all from MW-303-28 (Appendix J).
- Well 03-012: DRO, GRO, benzene, toluene, ethylbenzene, TAH and TAqH did not exceed endpoint criteria in this surface water protection well. This well is located southwest and downgradient of the site near East Canal.
- Well 03-107: GRO exceed endpoint criteria but benzene and total and dissolved lead did not. This well was not sampled for DRO, toluene, ethylbenzene or dibenz(a,h)anthracene. This well was also monitored for free product as part of SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, and is located in the southern portion of the mixed contaminant Area 303 plume.
- Well 04-211: GRO exceeded endpoint criteria in this well. This well is also part of GCI Compound site and is located within the center of the mixed contaminant Area 303 plume that consists of primarily of GRO.

- Well MRP-MW2: This well was also sampled as part of SWMU 62, New Housing Fuel Leak Area, Sandy Cove (Section 24). Concentrations of GRO and benzene have exceeded endpoint criteria in this well since 2006 (Table 24-2). Statistical analysis shows that concentrations of both contaminants are stable (Table 24-6). DRO was detected below the endpoint criteria in 2013 for the second consecutive sampling event; however the trend is increasing at the 80 percent confidence interval (Tables 24-2 and 24-6). Toluene, ethylbenzene and xylenes (TEX) compounds have not exceeded endpoint criteria since 2006 (seven sampling events, Table 24-2). DRO and total and dissolved lead did not exceed endpoint criteria (Table 7-2). This well is nested with MRP-MW3 and located within the northern portion of mixed contaminant Area 303 plume. Well MRP-MW2 is the deeper well with groundwater at a depth of 21.69 feet. Purportedly, MRP-MW3 is completed within the shallow perched aquifer.
- Well MW-303-28: This well was not sampled due to the thickness of free product present (0.07 feet). This well is located within the southern portion of the mixed contaminant Area 303 plume.
- Well MW-303-30: DRO and total and dissolved lead concentrations exceeded endpoint criteria. Benzene, toluene and ethylbenzene were below endpoint criteria. This well is located within the southwestern portion of the mixed contaminant Area 303 plume.
- Well MW-303-31: GRO, benzene, toluene, ethylbenzene, and total and dissolved lead did not exceed endpoint criteria. This well is located downgradient (west) of the mixed contaminant Area 303 plume.
- Well MW-303-32: Groundwater exceeded the DRO the endpoint criteria but GRO and benzene did not. This well is located within the northern portion of the mixed contaminant Area 303 plume north of the GCI Compound site.
- Well MW-303-37: TAH and TAqH exceed the endpoint criteria in this surface water protection well. DRO, benzene, toluene and ethylbenzene did not exceed endpoint criteria. This well is located upgradient of East Canal within the southwestern corner of the mixed contaminant Area 303 plume.
- Well MW-303-38: GRO, benzene, and total and dissolved lead concentrations exceeded endpoint criteria while toluene, ethylbenzene and dibenz(a,h)anthracene were below endpoint criteria. This well is located within the southwestern portion of the mixed contaminant Area 303 plume.

- Well MW-303-39: GRO, benzene, toluene, ethylbenzene, dibenz(a,h)anthracene, total and dissolved lead concentrations were below endpoint criteria in this well. This well is located within the southern portion of the mixed contaminant Area 303 plume.
- Well MW-303-40: GRO, benzene, toluene, ethylbenzene, dibenz(a,h)anthracene, total and dissolved lead concentrations were below endpoint criteria in this well. This well is located downgradient (west) the mixed contaminant Area 303 plume.
- Well MW-303-41: This well was not sampled as planned because it was dry. It is located in the central portion of the mixed contaminant Area 303 plume.
- A mixed DRO and GRO contaminant plume underlies the majority of the site (Figure 7-2) and overlaps the SWMU 62, New Housing Fuel Leak Area, Sandy Cove Housing DRO/GRO plume to the north (Figure 24-1) and the SWMU 62, New Housing Fuel Leak Area, Eagle Bay DRO/GRO plume to the south (Figure 24-2). The GRO plume underlying the GCI Compound site is part of the Area 303 plume occupying its central portion (Figure 9-1). In general, contaminated wells are physically located along and downgradient of two former avgas lines; one line runs east-west along the northern end of the site just south of Airport Road, the other runs parallel along the east side of Main Road. Results of these wells that affect Area 303 are presented in Section 9 (GCI Compound) and Section 24 (SMWU 62) and are reiterated here for the convenience of the reader.
    - GCI wells 04-100, 04-202, 04-210 and 04-213: These wells exceeded endpoint criteria for GRO and exhibit either stable concentrations or decreasing concentration trends. These wells are located within the central portion of the mixed contaminant Area 303 plume.
    - GCI well 04-204 had free product observed at 0.01 feet thick in 2013. This well is located within the central portion of the mixed contaminant Area 303 plume.
    - GCI well 04-701: This well is downgradient (west) of the central portion of the mixed contaminant Area plume and did not exceed endpoint criteria.
    - GCI wells 04-201, 04-203 and 04-211: These wells are monitored for free product which was not observed at any of these locations in 2013. These wells are located within the central portion of the mixed contaminant Area 303 plume.
    - SWMU 62 – Sandy Cove well 03-104: DRO has been detected above the endpoint criteria since 2007 and the trend analysis shows the DRO concentration is stable. Free product has not been observed in this well since 2006 (Appendix D-2). This well is located in the northern portion of the mixed contaminant Area 303 plume.

- SWMU 62 – Sandy Cove well 03-778: DRO was detected above the endpoint criteria in 2013. Statistical analysis shows the concentration is stable. This well is located on the northern portion of the mixed contaminant Area 303 plume.
- SWMU 62 – Sandy Cove well MRP-MW3: Concentrations of DRO, GRO, ethylbenzene and total xylenes exceeded endpoint criteria in this well in 2013. Statistical analysis shows that the concentrations of these compounds are stable. Benzene and toluene were below the endpoint criteria for the third consecutive event. This well is nested with well MRP-MW2 and located in a localized shallow perched aquifer within the northern portion of the mixed contaminant Area 303 plume.
- SWMU 62 – Eagle Bay well 03-502: GRO concentrations exceeded the endpoint criteria for the third consecutive sampling event. GRO exhibits a statistically significant decreasing concentration at the 80 and 95 percent confidence intervals. This well was sampled in the past for DRO and BTEX but met the endpoint criteria for these constituents (Table 2-1). This well is located within the southern portion of the mixed contaminant Area 303 plume.

- A shoreline inspection was performed on the northern portion of the section of East Canal downgradient of Area 303 and SWMU 62, New Housing Fuel Leak Area, Eagle Bay. A large petroleum seep has previously been identified in East Canal that is associated with SWMU 62. No visible indications of petroleum were observed along the shoreline north of the recovery trench which could be attributed to the existing seep.

7.6 RECOMMENDATIONS

Area 303 was newly added to the LTM program in 2013 after a remedial groundwater investigation was performed at the site which included the sampling of existing and newly installed monitoring wells and signing of the Final Decision Document for Area 303 (Navy 2012d). This site overlaps the GCI Compound, UST GCI-1 site (central portion), the SWMU 62, New Housing Fuel Leak Area, Sandy Cove Housing Area (to the north) and Eagle Bay Housing Area (to the south) (Figure 7-1). A mixed contaminant plume consisting of DRO, GRO and total and dissolved lead was defined at Area 303 in April 2013 during the initial groundwater monitoring event (Navy 2013d) and was again observed based on the 2013 LTM results presented in this report. Area 303 wholly encompasses the GRO plume observed at the GCI Compound site and there is no clear distinction between sites. Similarly, the Area 303 mixed contaminant plume extends into areas of contamination identified previously as the

western GRO/DRO plume in Sandy Cove and the northern GRO plume in Eagle Bay (see Section 24 for detailed discussion).

Monitoring data collected at these areas is relevant to monitoring the remedies at all three sites. Therefore, it is recommended that the two sites, Area 303 and GCI Compound, be combined in the next Groundwater Monitoring Report and discussed as one site as Area 303/GCI Compound, UST GCI-1. Sampling for GRO at wells 04-100, 04-202, 04-204, 04-210, 04-213 and 04-701 and monitoring for free product at wells 04-201, 04-203 and 04-211 should continue as prescribed.

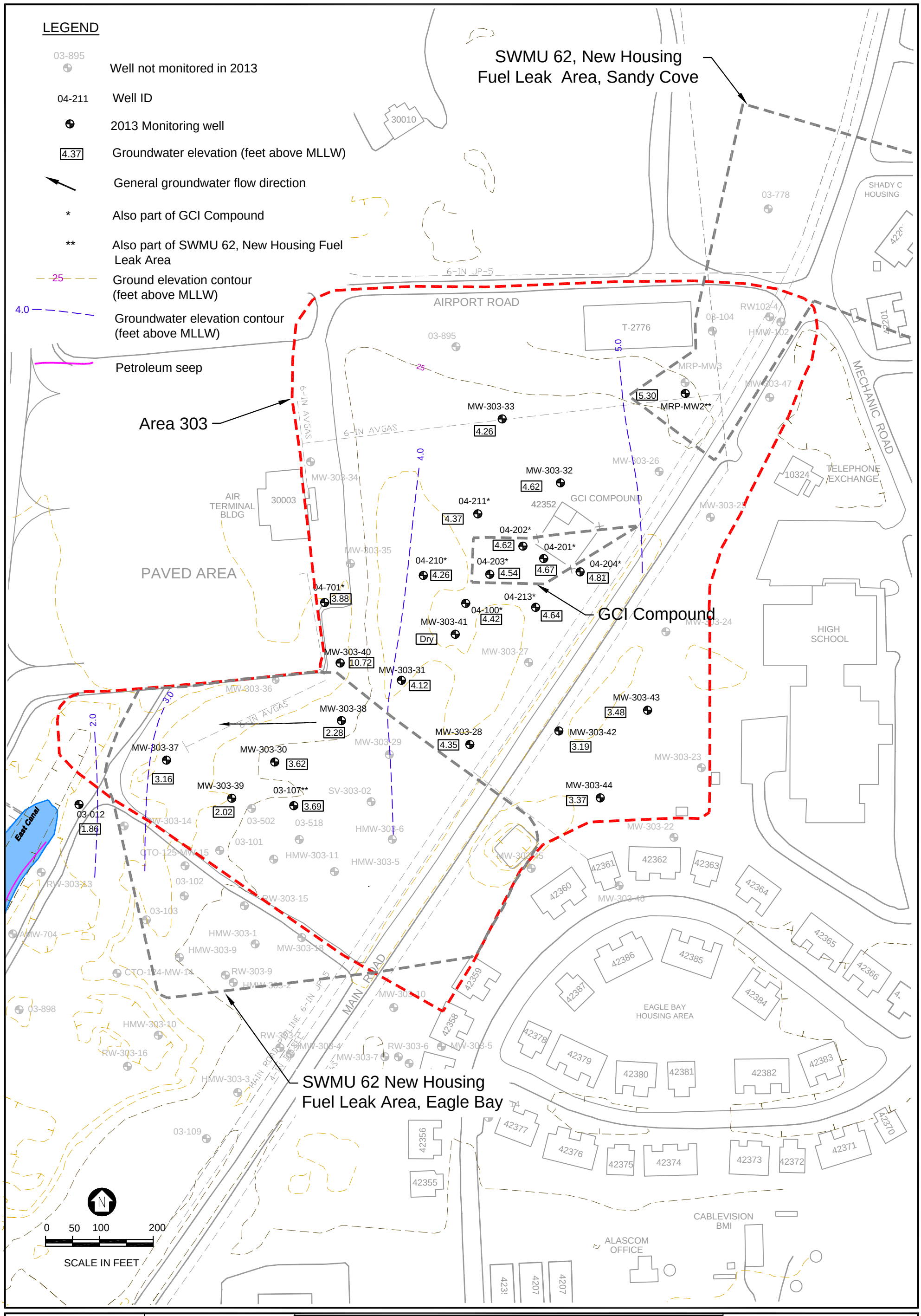
It is further recommended that SWMU 62, New Housing Fuel Leak Area, Sandy Cove Housing wells RW-102-4, 03-104, 03-778, MRP-MW2 and MRP-MW3 which are within or near the western GRO/DRO plume of Sandy Cove be monitored in the future as part of Area 303 and not as part of the SWMU 62, New Housing Fuel Leak Area. Sampling for DRO in wells 03-778 and 03-104; GRO, DRO and BTEX in well MRP-MW3; and sampling for GRO, DRO, BTEX and total and dissolved lead are recommended to be continued as prescribed. However, it is recommended that sampling for total and dissolved lead be added to MRP-MW3 since this is being monitored in nested well MRP-MW2. Monitoring for free product should also continue as prescribed at well RW-102-4.

For the same reason, it is recommended that well 03-502 which is within the northern GRO plume of Eagle Bay Housing Area be monitored in the future as part of Area 303 and not as part of the SWMU 62, New Housing Fuel Leak Area. Sampling for GRO should continue as prescribed at this location. In addition, it is recommended that sampling for total and dissolved lead be added to the monitoring scheme to mirror monitored analytes at nearby Area 303 wells. Sampling for DRO and BTEX is not necessary at this location since groundwater met endpoint criteria for these constituents in 2012.

Because wells MW-303-32 and MW-303-33 are downgradient of nested wells MRP-MW2 and MRP-MW3 which exceeded endpoint criteria for GRO, DRO, benzene, ethylbenzene and total xylenes, it is recommended that sampling for toluene, ethylbenzene and total xylenes be added to both wells and that sampling for DRO be added to well MW-303-33.

Because total xylenes have exceeded endpoint criteria in well MRP-MW2, it is recommended that total xylenes be added as a contaminant of concern for this site with an endpoint criterion of 10,000 µg/L.

Because long-term monitoring just began in 2013, it is recommended that all other sampling continue annually as prescribed.



U.S. NAVY	SEALASKA	Figure 7-1 Area 303 Potentiometric Surface	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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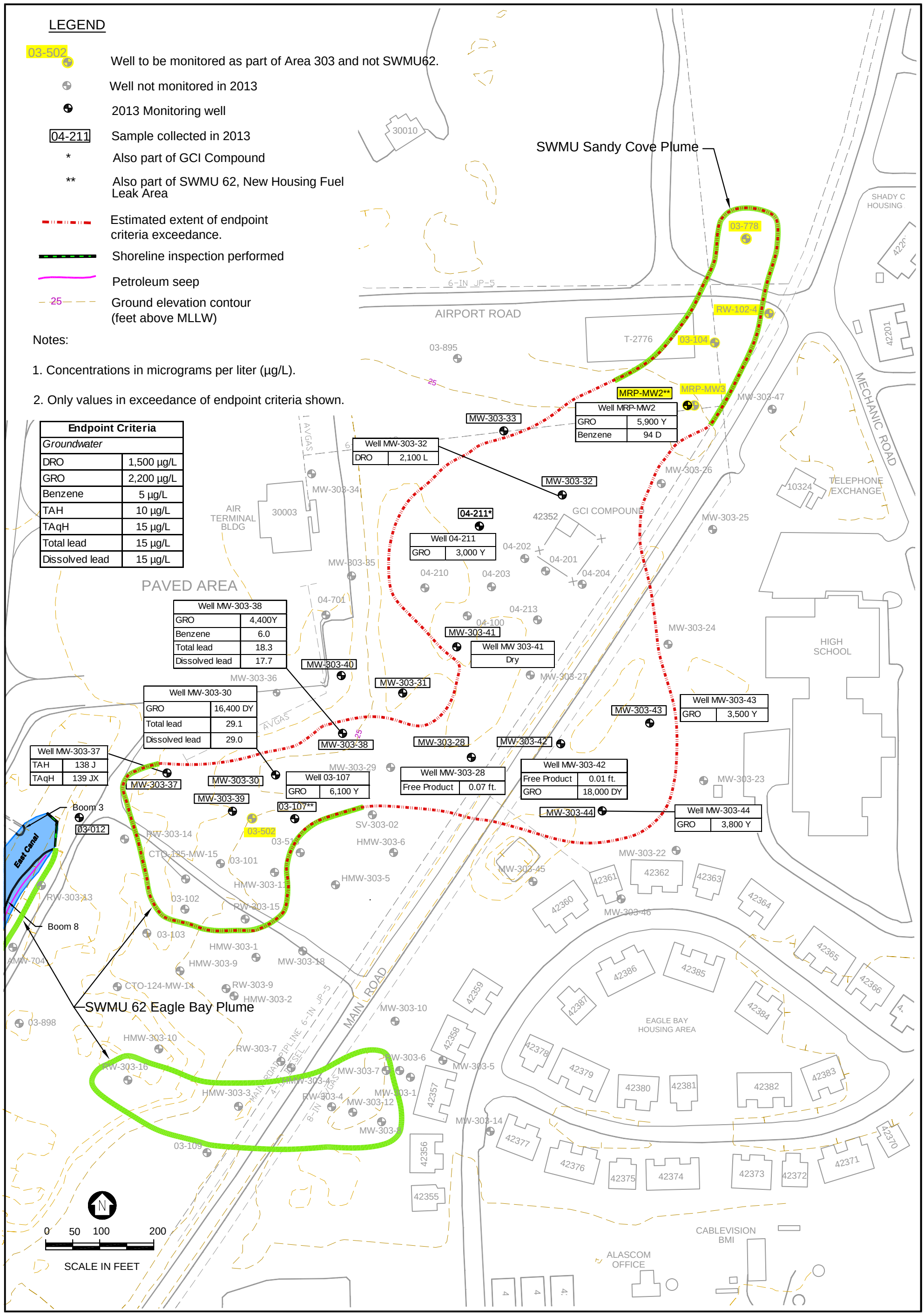
MARCH 24, 2014



U.S. NAVY	SEALASKA	Figure 7-2 Area 303 Sampling Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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JUNE 10, 2014

8 FORMER POWER PLANT, BUILDING T-1451

This section presents the results of groundwater monitoring performed at the Former Power Plant, Building T-1451 site during 2013. MNA is the remedy selected for this site (Navy, ADEC and EPA 2000). To comply with requirements specified for this remedy, the Navy conducts periodic groundwater sampling and water level/product thickness monitoring. In 2012, nine additional monitoring wells were installed to better characterize groundwater at the site. Groundwater samples are collected from these wells to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345), to verify that natural attenuation is occurring and to monitor for surface water protection.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, an interpretation of groundwater flow direction based on groundwater levels, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

8.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at twelve monitoring wells on August 26, 2013. Table 8-1 provides the measured depths-to-water, calculated groundwater elevations and if present product thicknesses. Figure 8-1 shows the location of the monitoring wells relative to potential source areas at the Former Power Plant site, the site topography, approximate groundwater flow direction and the downgradient surface water body (East Canal of the airport ditch system). The historic water level data indicate that the direction of groundwater flow is to the west, toward East Canal.

Ten monitoring wells were sampled between August 26 and 28, 2013. One well (MW-1451-6) did not stabilize, which required three casing volumes of groundwater be removed prior to sampling per CMP, Revision 5 (Navy 2012a). Field measurements were recorded on the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 8-1 lists the final field measurements recorded at each monitoring well prior to sample collection.

Free product was observed in two wells MW-1451-7 (0.5 feet) and MW-1451-9 (0.02 feet) during the 2013 LTM event. Samples were not collected from these wells as planned because product thickness was greater than or equal to 0.02 feet.

Table 8-1. 2013 Field Measurements for Former Power Plant, Building T-1451

	Physical Measurements				Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
Groundwater Samples											
01-118	19.68	16.55	3.13	0	5.88	0.425	8.2	0.00	8.81	0.02	-111
01-150	22.68	19.84	2.84	0	5.90	0.316	1.6	0.00	13.28	0.01	-56
MW-1451-1	6.56	6.51	0.05	0	6.34	0.431	2	0.00	10.14	0.02	-75
MW-1451-2	6.24	6.06	0.18	0	6.20	0.90	87.9	0.00	12.14	0.00	-123
MW-1451-3	5.09	5.27	-0.18	0	6.63	0.762	1.7	0.00	9.69	0.00	22
MW-1451-4	5.99	6.00	-0.01	0	5.90	0.369	0.1	0.00	7.01	0.00	-33
MW-1451-5	7.50	6.81	0.69	0	6.10	0.173	0.0	0.00	9.72	0.01	-52
MW-1451-6	6.15	5.29	0.86	0	6.18	0.524	38.5	0.00	10.09	0.00	-109
MW-1451-7	7.33	6.55[1]	0.78	0.50	FP	FP	FP	FP	FP	FP	FP
MW-1451-8	8.07	6.97	1.10	0	5.86	0.239	1.94	0.00	10.46	0.01	7
MW-1451-9	9.91	8.75[1]	1.15	0.02	FP	FP	FP	FP	FP	FP	FP
E-701	21.26	18.43	2.83	0	6.33	0.108	1	5.92	12.03	0.00	207
Surface Water Sample											
NL-08	NA	NA	NA	NA	6.84	0.905	26	8.41	12.67	0.0	-21

Notes:
[1] Corrected for presence of product in the well.
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

At well MW-1451-7, 0.10 gallons (380 milliliters) of product was recovered during the 2013 LTM event and managed per the Waste Management Plan (Navy 2013c). Periodic free product recovery activities were performed at this site from June 2013 through September 2013. Approximately 2.37 gallons of free product were recovered from one well, MW-1451-7, during this time period (see Appendix J). Free product recovery operation and maintenance activities are summarized in the Remedial Action Summary Report, Free Product Recovery (Navy 2014).

The eastern shoreline of East Canal was inspected from booms 9/12 to the southern-most point of the canal at the exit culvert (Crossover Canal) that flows into West Canal (Figure 8-1). One petroleum shoreline seep is located in East Canal approximately 75 feet downgradient of boom 9/12 where boom 11 is being maintained. This seep affects approximately 40 feet of the shoreline of East Canal and has expanded approximately five feet past the southern end of boom 11. Black-stained oily sediments, moderate petroleum odor, sheen and stressed vegetation were observed at this seep during the 2013 inspection. Boom 11 was expanded to encompass the seep after the inspection was conducted. In general, booms are effective in preventing the migration of sheen to downgradient surface waters; however, malfunction of the East Canal pumps and subsequent elevated water levels in East Canal were allowing sheen to escape from the booms making them less effective. This is described in further detail in the Remedial Action Summary Report, Free Product Recovery (Navy 2014).

Remedial activities were performed at a former seep location at boom 9/12 in July 2012 as part of the Navy's Petroleum Sites Program. Activities included removal of petroleum-impacted soils and replacement of approximately 100 feet of shoreline with amended clean fill. Since these activities have taken place, the flow of the petroleum seep has ceased. During the shoreline inspection in 2013, no evidence of petroleum contamination was observed at this location.

One surface water sample and one sediment sample (NL-08) were collected downgradient of the southern-most boom (boom 11) to determine the effectiveness of sorbent booms (Figure 8-2). Petroleum odor and light sheen were noted on the surface water when the sediment was disturbed during sampling. Results of shoreline inspections are summarized in Section 4.1.3.

8.2 TARGET ANALYTE RESULTS

The groundwater samples collected from monitoring wells 01-118, 01-150, MW-1451-1, MW-1451-2, MW-1451-3, MW-1451-4, MW-1451-5, MW-1451-6 and MW-1451-8 were

analyzed for DRO. The groundwater samples collected from monitoring wells MW-1451-2, MW-1451-3 and MW-1451-4 were also analyzed for BTEX and PAHs for the calculation of TAH and TAqH. The monitoring wells are located within or along the edge of a dissolved petroleum plume and downgradient of the former petroleum-release area but upgradient (east) from East Canal.

One surface water sample and one sediment sample were collected downgradient of the southern-most boom (boom 11) at location NL-08. Surface water was analyzed for DRO, BTEX and PAHs for the calculation of TAH and TAqH. Sediment was analyzed for DRO and PAHs. Because no risk-based endpoint criteria have been established for East Canal, DRO results were compared to the criteria established for South Sweeper Creek which may or may not reflect risks associated with East Canal.

Figure 8-2 shows the locations of the sampling locations and the analytical results that exceed the applicable endpoint criteria. Table 8-2 presents groundwater results for the 2004 through 2013 events. Tables 8-3 and 8-4 present the surface water and sediment analytical results, respectively. The analytical results obtained for these locations from 1999 through 2013 are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F. Wells MW-1451-1 through MW-1451-9 were newly installed in 2012; therefore, historical data is not available.

DRO was detected above the endpoint criteria of 1,500 µg/L in groundwater collected from six of the nine wells sampled ranging from 2,600 µg/L (well MW-1451-8) to 12,000 µg/L (well 01-118). TAqH exceeded the endpoint criteria of 15 µg/L in groundwater collected from well MW-1451-2 (20 µg/L). The remaining TAqH concentrations were below the endpoint criteria. TAH was below the endpoint criteria of 15 µg/L in all three wells for which it was calculated.

Concentrations of DRO, TAH and TAqH were detected in the surface water sample collected at location NL-08 below endpoint criteria (250 µg/L, 10 µg/L and 15 µg/L, respectively).

Concentrations of DRO, phenanthrene and methylnaphthalene were detected in the sediment sample collected at location NL-08 below endpoint criteria (90.6 mg/L, 0.225 mg/L and 0.225 µg/L, respectively).

Table 8-2. Analytical Results for Petroleum-Related Chemicals at Former Power Plant, Building T-1451

Well Location	Year	DRO (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)
01-118 Plume Source Area	2004	**7,080**	NP	NP
	2005	**11,200 J**	NP	NP
	2006	**8,700**	NP	NP
	2007	**7,000 Y**	NP	NP
	2008	**9,300 Y**	NP	NP
	2009	**8,700 Y**	NP	NP
	2010	**7,100 Y**	NP	NP
	2011	**10,000 Y**	NP	NP
	2012	**9,400 YJ**	NP	NP
	2013	**12,000 Y**	NP	NP
01-150 Downgradient	2004	394	NP	NP
	2005	927 J	NP	NP
	2006	1,400	NP	NP
	2007	1,100 Y	NP	NP
	2008	**3,400 Y**	NP	NP
	2009	1,100 Y	NP	NP
	2010	1,300 Y	NP	NP
	2011	1,400 Y	NP	NP
	2012	1,300 YJ	NP	NP
	2013	1,400 Y	NP	NP
MW-1451-1 Plume Source Area	2013	**5,600 Y**	NP	NP
MW-1451-2 Plume Source Area	2013	**6,200 Y**	6.6 J	**20 JDX**
MW-1451-3 Plume Edge	2013	1,300 Y	2.5 UJ	0.03 X
MW-1451-4 Plume Edge	2013	160 Y	2.5 UJ	0.05
MW-1451-5 Plume Source Area	2013	**3,700 Y**	NP	NP
MW-1451-6 Plume Source Area	2013	**5,600 Y**	NP	NP
MW-1451-7 Plume Source Area	2013	**FP**	NP	NP
MW-1451-8 Plume Source Area	2013	**2,600 Y**	NP	NP
MW-1451-9 Plume Source Area	2013	**FP**	NP	NP
Endpoint Criteria[3]		1,500	10	15

Notes:
[1] TAH results were calculated by summing the detected concentrations of BTEX when one or more were detected and by summing the quantitation limits when none were detected.
[2] TAqH results were calculated by summing the detections of BTEX and 16 PAHs when one or more were detected and by summing the quantitation limits when none were detected.
[3] The TAH and TAqH endpoint criteria are based on ADEC water quality standards as specified in 18 AAC 70.
Bold indicates reported concentration is greater than the endpoint criteria or water quality standard.

Table 8-3. Analytical Results for Surface Water at Former Power Plant, Building T-1451

Location	Year	DRO (µg/L)	Indeno(1,2,3-cd)pyrene (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)
NL-08	2010	240 Y	0.020 U	6.2 J	6.2 J
	2011	130 Y	0.020 U	7.4 J	7.5 J
	2012	160 YJ	0.020 U	3.4 J	3.4 J
	2013	240 Y	0.020 U	1.1 J	1.1 J
Endpoint Criteria[3,4]		250	0.28	10	15

Notes:
[1] TAH results were calculated by summing the detected concentrations of BTEX when one or more were detected and by summing the quantitation limits when none were detected.
[2] TAqH were calculated by summing the detections of BTEX and 16 PAHs when one or more were detected and by summing the quantitation limits when none were detected.
[3] The TAH and TAqH endpoint criteria are based on ADEC water quality standards as specified in 18 AAC 70.
[4] Endpoint criteria for East Canal have not been established, so endpoints for South Sweeper Creek were used.

Table 8-4. Analytical Results for Sediment at Former Power Plant, Building T-1451

Location	Year	DRO (mg/kg)	2-Methylnaphthalene (mg/kg)	Phenanthrene (mg/kg)
NL-08	2010	51 Y	0.0031 U	0.0031 U
	2011	**420 DY**	0.0040 U	0.029
	2012	**170 DY**	0.0050 U	0.0030 J
	2013	84 DY	0.0032 U	0.0027 J
Endpoint Criteria[1]		90.6	0.0202	0.225

Notes:
[1] Endpoint criteria for East Canal have not been established so endpoints for South Sweeper Creek were used.
Bold indicates reported concentration is greater than the endpoint criteria.

8.3 MONITORED NATURAL ATTENUATION

The CMP, Revision 5 (Navy 2012a), required the collection of NAPs at Former Power Plant, Building T-1451 during the 2013 monitoring event. Table 8-5 presents the analytical results for the NAPs that were collected in 2013. NAPs data from well E-701 was used to represent background conditions in the following natural attenuation discussion. Evidence of aerobic digestion is seen by the elevated CO_2 concentrations in plume wells (up to 200 mg/L) compared to the background well E-701 (11 mg/L) and the current onsite anaerobic conditions are shown by the depleted DO concentrations (0.0 mg/L) compared to the background concentration of 5 mg/L. The alkalinity concentrations are also higher in site plume wells (up to 188 mg/L) than background (not detected).

Sulfate concentrations for several wells within the contaminant plume are depleted and below the quantitation limit of 0.20 mg/L compared to background (3.09 mg/L), indicating sulfate reduction is occurring at the site. Onsite ferrous iron concentrations in plume wells (up to 50 mg/L) are elevated compared to background (0 mg/L), indicating the occurrence of iron reduction.

Finally, strong evidence of methanogenesis is observed at the Former Power Plant, Building T-1451 site, as demonstrated by elevated methane concentrations in plume wells up to 10,000 µg/L compared to background concentrations (0.38 µg/L).

These combined data indicate that biodegradation of petroleum hydrocarbons is likely occurring by iron (II) reduction, sulfate reduction and methanogenesis which demonstrates anaerobic natural attenuation of petroleum contamination is occurring at the site.

Table 8-5. 2013 Analytical and Field Measurement Data for NAPs for Former Power Plant, Building T-1451

		Laboratory-Reported Results			Field Test Kit Results		
Well Location	**Monitoring Purpose**	**Alkalinity SM 2320B (mg/L)**	**Sulfate 300.0 (mg/L)**	**Dissolved Methane RSK175 (µg/L)**	**Carbon Dioxide[1] (mg/L)**	**Ferrous Iron[2] (mg/L)**	**Dissolved Oxygen[3] (mg/L)**
01-118	MNA	188	0.44	4,800	200	45	0.2
01-150	MNA	156	0.20 U	1,300	100	35	0.9
MW-1451-1	MNA	139	0.63	2,000	100	8	0.0
MW-1451-2	MNA	121	69.6	10,000	100	40	0.05
MW-1451-3	MNA	130	33.0	630	18	1	1.0
MW-1451-4	MNA	51.3	10.4	6.0	25	0.0	1.0
MW-1451-5	MNA	45.7	0.63	510	60	20	0.0
MW-1451-6	MNA	60.9	0.10 J	2,200	75	50	1.0
MW-1451-7	MNA	FP	FP	FP	NC	NC	NC
MW-1451-8	MNA	85.7	1.48	1,500	90	20	1.0
MW-1451-9	MNA	FP	FP	FP	NC	NC	NC
E-701	Background	25.2 U	3.09	1.3 U	11	0	5

Notes:
[1] Field test kit, CHEMetrics K-1910 and K-1920
[2] Field test kit, CHEMetrics K-6210
[3] Field test kit, CHEMetrics K-7501 and K-7512

8.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a). Trend evaluation was conducted only for analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. Sen's slopes were calculated only for wells with decreasing trends. Results of the statistical evaluations are summarized in Table 8-6. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well 01-118: DRO in this well exhibits an increasing trend at the 80 percent confidence interval.

8.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring performed at the Former Power Plant, Building T-1451 site in 2013. The conclusions are as follows:

- Groundwater Flow: Based on the water levels measured in 2013, the approximate groundwater flow direction at the site is to the west, toward East Canal.
- MNA: The groundwater parameters obtained during the 2013 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Free product was detected in two wells at this site in 2013. Product was measured in well MW-1451-7 at a thickness of 0.50 feet (0.10 gallons [0.38 liter] of product recovered) and in well MW-1451-9 at a thickness of 0.02 feet. Periodic free product recovery performed from October 2012 through September 2013 recovered 2.37 gallons of product from the site.
- Well 01-118: The DRO concentration has remained above the endpoint criteria established for groundwater used as a drinking water source (1,500 µg/L) for the last 10 monitoring events. The Mann-Kendall trend evaluation performed on the DRO data collected between 2002 and 2013 exhibits an increasing trend at the 80 percent confidence interval.
- Well 01-150: The DRO concentration exceeded endpoint criteria in 2008 but has been below the endpoint criteria for the last five years.
- Wells MW-1451-1, MW-1451-5, MW-1451-6 and MW-1451-8: The DRO concentrations exceeded the endpoint criteria.
- Well MW-1451-2: The DRO and TAqH concentrations exceeded their respective endpoint criteria.
- Wells MW-1451-3 and MW-1451-4: Groundwater concentrations were below endpoint criteria for DRO, TAH and TAqH.
- Wells MW-1451-7 and MW-1451-9 were not sampled due to the presence of free product greater than or equal to 0.02 feet in thickness.
- A shoreline inspection was conducted downgradient of this site on the eastern bank of East Canal, between the former location of well 01-151 and the southern-most end of the canal. Oily sediments, pooled product, surface water, sheen and petroleum odor were observed along the shoreline at boom location 11 which has expanded approximately 10 feet since 2012 (see Section 4.1.3). No evidence of petroleum contamination was observed the former seep location at boom 9/12.

- Sampling location NL-08: Surface water and sediment samples were collected downgradient of the southern-most boom (boom 11) in East Canal to determine whether the installed booms were effectively preventing the migration of petroleum contamination. The surface water and sediment samples collected from this location did not exceed endpoint criteria in 2013. No active petroleum seep was observed at this sampling location, but odor and sheen were observed when sediment was disturbed during sampling.

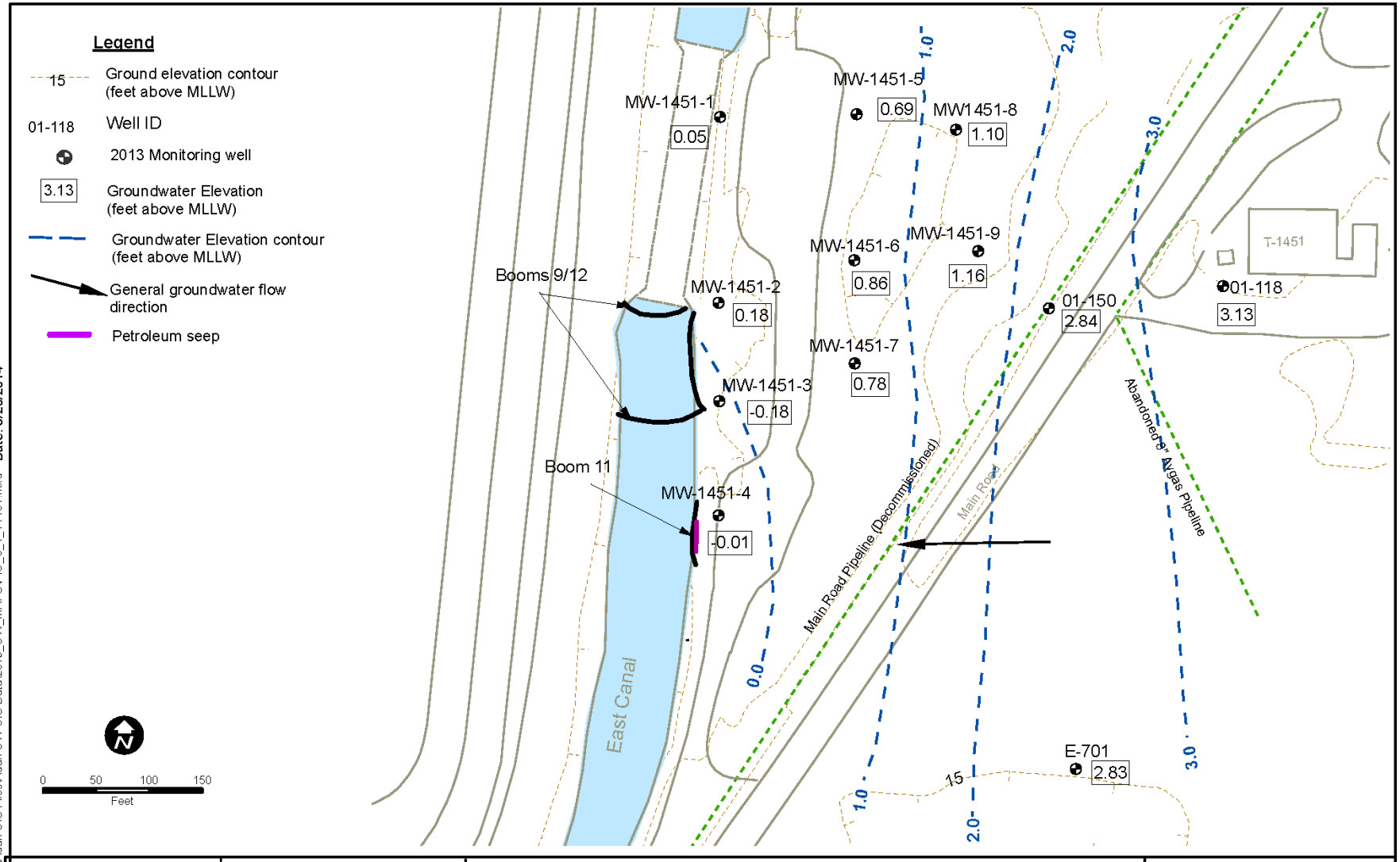
8.6 RECOMMENDATIONS

DRO and TAqH concentrations exceeded endpoint criteria in site groundwater and DRO exceeded endpoint criteria in sediment collected from East Canal. Additionally, free product was observed in two onsite wells up to 0.5 feet. Because of this, the shoreline downgradient of the remediated area should also continue to be monitored and boom 9/12 maintained to ensure the treatment remains effective. However, NAPs monitoring indicates that natural attenuation is occurring by iron (II) reduction, sulfate reduction and methanogenesis in groundwater. For these reasons, monitoring of groundwater, surface water and sediment should continue onsite and in East Canal downstream of boom 11 as prescribed to monitor the effectiveness of the remedy.

Table 8-6. Concentration Trend Evaluation for Former Power Plant, Building T-1451

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Two Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
01-118	DRO	Yes	12,000Y	1,500	10	16	Increasing	No trend	NA	NC	NC	NC	NC

Notes:
[1] Endpoint criteria are established from ADEC cleanup levels for groundwater used as a drinking water source.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.



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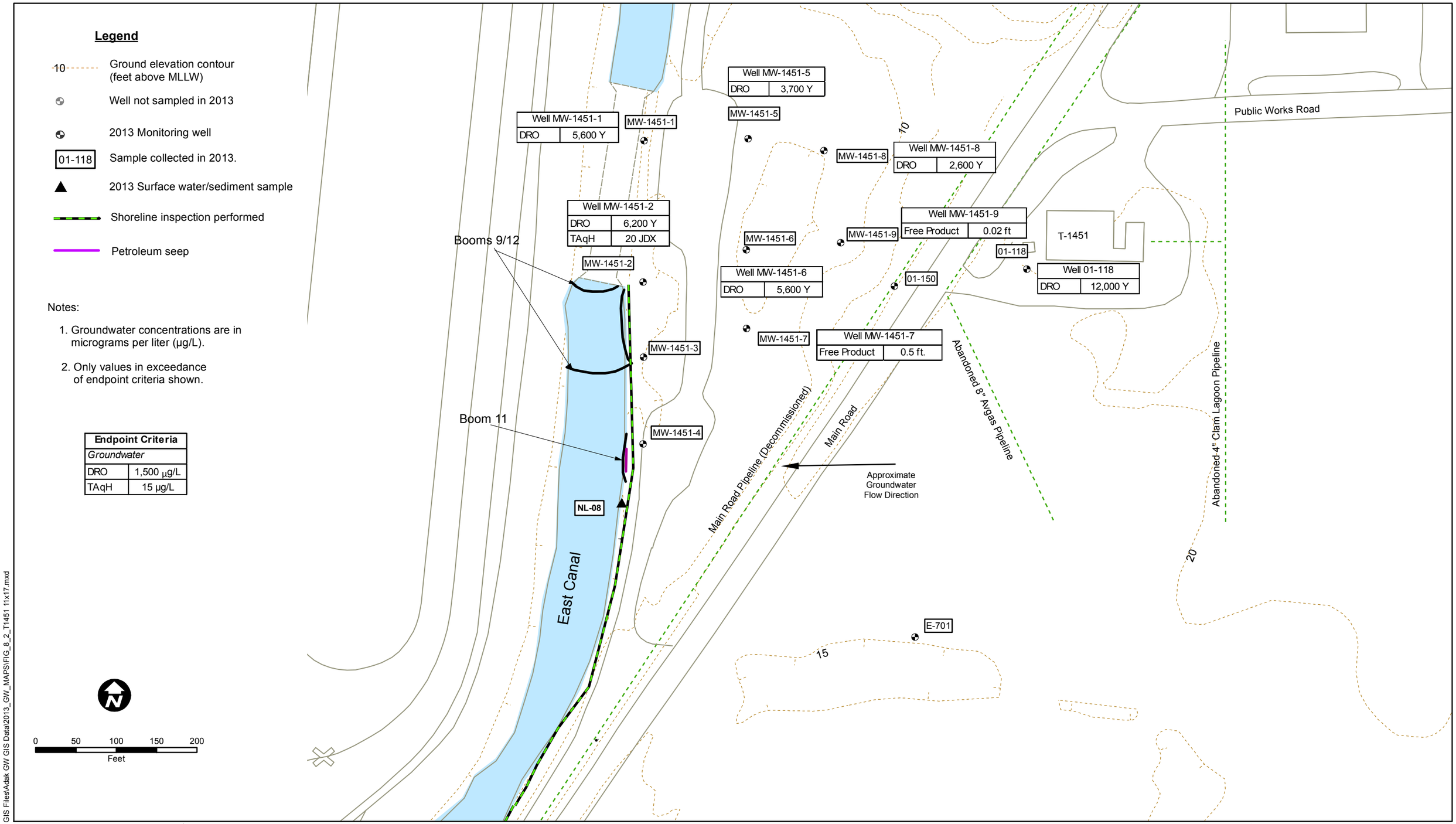
U.S. NAVY	SEALASKA	Figure 8-1 Former Power Plant, Building T-1451 Potentiometric Surface	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report



U.S. NAVY	SEALASKA	Figure 8-2 Former Power Plant, Building T-1451 Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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9 GCI COMPOUND, UST GCI-1

This section presents the results of groundwater monitoring performed at the GCI Compound, UST GCI-1 site during 2013. The remedy specified for this site in the OU A ROD is free product recovery (Navy, ADEC and EPA 2000). MNA with ICs was selected by the Navy and ADEC as the post-free product recovery remedy for this site (Navy and ADEC 2005). To comply with requirements specified for the MNA remedy, the Navy conducts annual groundwater monitoring. Groundwater samples are collected from these wells to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345) and to evaluate natural attenuation.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, an interpretation of groundwater flow direction based on groundwater levels, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities.

9.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at nine monitoring wells on the site on August 30, 2013. Table 9-1 provides the measured depths-to-water (corrected for product thickness, if present), calculated groundwater elevations and, if present, the product thickness. Figure 9-1 shows the locations of the wells relative to potential source areas at the GCI Compound site, the site topography and the interpreted groundwater flow direction. A discontinuous perched aquifer was previously identified in the location of the former UST (Navy 2004), but none of the wells measured in 2013 are representative of this shallow water table. The GCI Compound site is wholly located within the Area 303 site, for which the potentiometric surface was shown in Figure 7-1. This figure also incorporates data from the GCI Compound site. The historic water level data indicate that the direction of groundwater flow in the main aquifer beneath the site is to the west, toward East Canal. Groundwater elevations collected in 2013 were compared with historical data and are consistent with this interpretation. Product was observed in monitoring well 04-204 (0.01 feet) at GCI compound during the 2013 sampling event.

Table 9-1. 2013 Field Measurements for GCI Compound, UST GCI-1

	Physical Measurements				Groundwater Parameters						
Well Location	Casing Elevation (ft MLLW)	Depth-to-Water (ft BTOC)	Groundwater Surface Elevation (ft MLLW)	Measured Product Thickness (ft)	pH (SU)	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Salinity (%)	ORP (mV)
04-100	32.80	28.38	4.42	0	6.26	0.615	28.4	0.00	7.25	0.00	-96
04-201	30.61	25.94	4.67	0	NP	NP	NP	NP	NP	NP	NP
04-202	30.90	26.28	4.62	0	6.09	0.145	2.4	0.00	7.02	0.01	-69
04-203	31.13	26.59	4.54	0	NP	NP	NP	NP	NP	NP	NP
04-204	30.82	26.01[1]	4.81	0.01	5.82	0.239	0.0	0.00	7.55	0.01	-18
04-210	29.22	24.96	4.26	0	5.93	0.180	0.0	0.00	7.09	0.01	-45
04-211[2]	28.45	24.08	4.37	0	NP	NP	NP	NP	NP	NP	NP
04-213	28.70	24.06	4.64	0	5.90	0.152	0.0	0.00	7.55	0.01	-53
04-701	18.19	14.31	3.88	0	5.81	0.115	0.0	0.00	9.07	0.01	46

Notes:
[1] Corrected for presence of product in the well.
[2]Also sampled as part of Area 303 wells.
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

Groundwater sampling was performed at six monitoring wells on September 5 and 6, 2013. Field measurements were recorded on the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 9-1 presents the final field measurements recorded prior to sample collection. Groundwater parameters stabilized at all monitoring wells.

9.2 TARGET ANALYTE RESULTS

The groundwater samples collected from wells 04-100, 04-202, 04-204, 04-210, 04-213 and 04-701 were analyzed for GRO.

Figure 9-1 shows the locations of the wells sampled and summarizes the analytical results that exceeded the applicable endpoint criteria. Wells 04-210, 04-213 and 04-100 are situated within and near the interpreted margins of the dissolved hydrocarbon plume. Well 04-701 is located along the downgradient edge of the dissolved hydrocarbon plume. Well 04-204 is located on the upgradient edge of the dissolved hydrocarbon plume. Because of the presence of free product observed in the past, well 04-202 is assumed to be close to the inferred source area. Table 9-2 summarizes the analytical results. The historical analytical results obtained for these locations are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

GRO was detected above the endpoint criteria of 2,200 µg/L in samples collected from wells 04-100 (2,900 µg/L), 04-202 (4,100 µg/L), 04-210 (5,500 µg/L) and 04-213 (3,200 µg/L). GRO did not exceed endpoint criteria in upgradient well 04-204 (490 µg/L) or downgradient well 04-701 (not detected).

9.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that biodegradation of petroleum hydrocarbons is likely occurring by iron (II) reduction; sulfate reduction; and methanogenesis as shown by elevated ferric iron concentrations, depleted sulfates and elevated methane concentrations in comparison to background conditions. Groundwater parameters collected during the 2013 LTM event, which are presented in Table 9-1, provide evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and depleted dissolved oxygen (0.0 mg/L). A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

Table 9-2. Analytical Results for Petroleum-Related Chemicals for GCI Compound, UST GCI-1

Well Location	Year	GRO (µg/L)
04-100 Downgradient	2004	**5,300 J**
	2005	**4,420 J**
	2006	**5,200 J**
	2007	**4,400 Y**
	2008	**4,000 Z**
	2009	**4,400 Z**
	2010	**3,100 Y**
	2011	**2,900 Y**
	2012	**3,800 Y**
	2013	**2,900 Y**
04-202 Plume Source Area	2002	**5,100**
	2005	**FP**
	2006	**FP**
	2007	**FP**
	2008	**4,400 Y**
	2009	**5,200 Y**
	2010	**3,300 Y**
	2011	**FP**
	2012	**3,400 Y**
	2013	**4,100 Y**
04-204 Upgradient	2006	230
	2007	380 Y
	2008	230 Y
	2009	250 Z
	2010	300 Y
	2011	410 Y
	2012	200 Y
	2013	490 Y
04-210 Downgradient	2002	**5,000**
	2005	**4,580 J**
	2006	**6,400**
	2007	**8,300 DY**
	2008	**6,100 Y**
	2009	**6,800 Y**
	2010	**4,800 Y**
	2011	**4,700 Y**
	2012	**6,300 Y**
	2013	**5,500 Y**
04-213 Plume	2006	**3,800 J**
	2007	**5,900 Y**
	2008	**6,900 Z**
	2009	**4,400 Z**
	2010	**3,300 Y**
	2011	**4,000 Y**
	2012	**3,900 Y**
	2013	**3,200 Y**

Table 9-2. Analytical Results for Petroleum-Related Chemicals for GCI Compound, UST GCI-1 (continued)

Well Location	Year	GRO (µg/L)
04-701	2004	199
Downgradient	2005	547
Plume Edge	2006	420 J
	2008	700 Y
	2010	230 Y
	2012	100 Y
	2013	100 U
Endpoint Criteria		2,200

Note:
Bold indicates reported concentration is greater than the endpoint criteria.

9.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a).

Trend evaluation was conducted only for analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. Sen's slopes were calculated only for wells with decreasing trends. The results of the Mann-Kendall and Sen's trend evaluations are presented in Table 9-3. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well 04-100: The GRO concentration exhibits a decreasing trend at the 80 and 95 percent confidence intervals. The Sen's evaluation also indicates a statistically significant decreasing trend, with a median slope of -200.
- Wells 04-202 and 04-210: The GRO concentrations exhibit no trend at either the 80 or 95 percent confidence interval. The coefficients of variation indicate the concentrations are stable.
- Well 04-213: The GRO concentration exhibits a decreasing trend at the 80 percent confidence interval. The Sen's evaluation also indicates a statistically significant decreasing trend, with a median slope of -250.

9.5 CONCLUSIONS

This section presents conclusions based on a review of analytical results obtained for groundwater monitoring conducted at the GCI Compound, UST GCI-1 in 2013. The conclusions are as follows:

- Groundwater Flow: Based on the field measurements in 2013, the interpreted groundwater flow direction is to the west.
- The GCI Compound Site is located within Area 303 and corresponding mixed contaminant plume (Figures 7-1 and 7-2).
- MNA: The groundwater parameters obtained during the 2013 LTM event support evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Product was observed in one well at this site in 2013. Product was measured in well 04-204 at a thickness of 0.01 feet.
- Well 04-100: This well is located within the contaminant plume. The GRO concentration in 2013 exceeded the endpoint criteria. Mann-Kendall trend and Sen's evaluation performed on the GRO data collected between 2003 and 2013 indicates the concentration is decreasing with a statistical significance with a 95 percent degree of confidence.
- Well 04-202: This well is located within the contaminant plume. The GRO concentration in 2013 exceeded the endpoint criteria. Mann-Kendall performed on the GRO data collected between 2002 and 2013 indicates the concentration is stable with no trend at both the 80 and 95 percent confidence intervals.
- Well 04-204: This well is located on the upgradient edge of the contaminant plume. GRO has been detected at concentrations below the endpoint criteria in this upgradient well since 2006, when sampling began at this well (eight consecutive events).
- Well 04-210: This well is a downgradient well located within the contaminant plume. GRO has been detected at concentrations above the endpoint criteria since 2002, with the exception of 2003 and 2004 when the well was not sampled. The trend evaluation performed on GRO data from 2002 to 2013 indicates the concentration is stable with no trend at the 80 or 95 percent confidence intervals.
- Well 04-213: This well is located within the contaminant plume. GRO has been detected above the endpoint criteria since 2006, when sampling began at this well. The Mann-Kendall and Sen's trend evaluations performed on the GRO data indicates a decreasing concentration at the 80 percent confidence interval.
- Well 04-701: GRO has been detected below the endpoint criteria in this downgradient well since 2006, when sampling began.

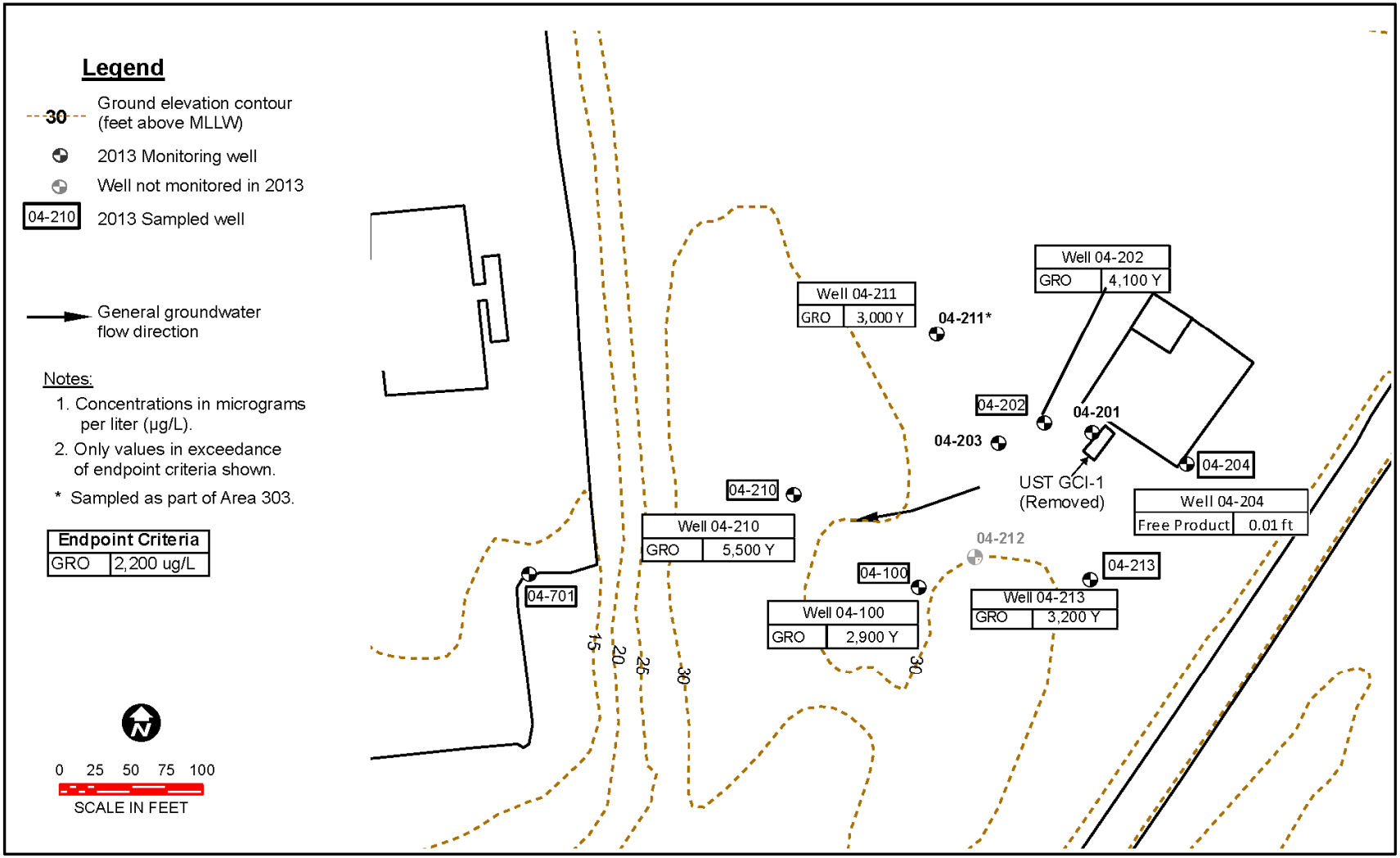
9.6 RECOMMENDATIONS

The GCI Compound, UST GCI-1 site is included wholly within Area 303. Area 303 was added to the LTM program in 2013 after a remedial groundwater investigation was performed at the site which included the sampling of existing and newly installed monitoring wells. A contaminant plume consisting of GRO, DRO and total and dissolved lead was defined at Area 303 in April 2013 during the initial groundwater monitoring event (Navy 2013d). The GRO plume observed at the GCI Compound site is part of the mixed contaminant plume identified at Area 303 and there is no clear distinction between sites. Groundwater analytical data collected at both sites is relevant to monitoring the remedies at both sites. Therefore, it is recommended that the two sites, Area 303 and GCI Compound, be combined in the next Groundwater Monitoring Report and discussed as one site as Area 303/GCI Compound, UST GCI-1. It is recommended that all monitoring at the GCI Compound site continue as prescribed.

Table 9-3. Concentration Trend Evaluation for GCI Compound, UST GCI-1

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Two Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
04-100	GRO	Yes	3,800 Y	2,200	10	-35	Decreasing	Decreasing	NA	-200	Yes	-300	-50
04-202	GRO	Yes	4,100 Y	2,200	6	-5	No trend	No trend	Stable	NC	NC	NC	NC
04-210	GRO	Yes	6,300 Y	2,200	10	-1	No trend	No trend	Stable	NC	NC	NC	NC
04-213	GRO	Yes	3,900 Y	2,200	8	-12	Decreasing	No trend	NA	-250	Yes	-700	-33

Notes:
[1] Endpoint criteria are established from ADEC cleanup levels for groundwater used as a drinking water source.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.



U.S. NAVY	SEALASKA	Figure 9-1 GCI Compound, UST GCI-1 Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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10 HOUSING AREA (ARCTIC ACRES)

This section presents the results of groundwater monitoring performed at the Housing Area (Arctic Acres) site during August 2013. MNA is the remedy selected for this site (Navy, ADEC and EPA 2000). To comply with requirements specified for this remedy, the Navy conducts periodic groundwater sampling and water level/product thickness monitoring. Groundwater samples are collected from these wells to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345) and to verify that natural attenuation is occurring.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentrations on data, conclusions based on these analyses, and recommendations for future monitoring activities at the site.

10.1 FIELD MEASUREMENTS

The site is underlain by the thick sand sequence containing the Downtown Aquifer. Monitoring wells were gauged on August 30, 2013. Depth-to-water and product thickness measurements were collected at four wells in 2013. Table 10-1 provides the measured depth–to-water, the calculated groundwater elevations and if present, the product thickness. Figure 10-1 shows the locations of the wells relative to potential source areas at the Housing Area (Arctic Acres), site topography and the approximate groundwater flow direction. The historic water level data indicate that the direction of groundwater flow in the main aquifer beneath the site is to the northeast, toward Kuluk Bay. Groundwater elevations collected in 2013 were compared with historical data and are consistent with this interpretation. Previous monitoring has shown that a water table high (divide) occurs just west of well 03-421, with the groundwater southwest of the divide flowing to the southwest toward East Canal. This divide may migrate east and west seasonally. Free product was not observed in any of the wells in 2013.

Table 10-1. 2013 Field Measurements for Housing Area (Arctic Acres)

	Physical Measurements				Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
03-416	26.40	19.96	6.44	0	5.89	0.191	0.3	0.00	7.82	0.01	-77
03-420	29.76	23.06	6.70	0	6.05	0.216	0.0	0.00	7.40	0.00	27
03-421	29.81	23.05	6.76	0	5.85	0.299	0.0	0.00	8.53	0.01	-60
03-890	30.54	23.90	6.64	0	5.77	0.361	50.1	0.00	8.80	0.02	-89

Notes:
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

Groundwater sampling was performed at the four scheduled monitoring wells on August 30 and 31, 2013. Field measurements were recorded on the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 10-1 lists the final field measurements recorded at the monitoring wells prior to sample collection. A review of the sampling data reported for this site indicates that prior to sample collection all groundwater parameters stabilized in all wells.

10.2 TARGET ANALYTE RESULTS

Groundwater samples were collected from the Housing Area (Arctic Acres) in 2013 from four monitoring wells, 03-416, 03-420, 03-421 and 03-890, which were all analyzed for DRO. Table 10-2 presents the historical analytical results for all site monitoring wells. The historical analytical results obtained for these locations are also summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F. Figure 10-1 shows the locations of the site wells and analytical results that exceed the applicable endpoint criteria.

DRO was detected above the endpoint criterion of 1,500 µg/L in the samples from wells 03-416 (1,600 µg/L), 03-420 (3,300 µg/L), 03-421 (3,000 µg/L) and 03-890 (11,000 µg/L).

10.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine if natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that biodegradation of petroleum hydrocarbons is likely occurring by iron (II) reduction, sulfate reduction and methanogenesis, as shown by elevated ferric iron concentration, depleted sulfates and elevated methane concentrations in comparison to background conditions. Groundwater parameters presented in Table 10-1 collected during the 2013 LTM event support evidence of continued natural attenuation as shown by the reducing environment (low or negative ORP) and depleted oxygen (0.00 mg/L) within the plume. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

Table 10-2. Analytical Results for Petroleum-Related Chemicals for Housing Area (Arctic Acres)

Well Location	Year	DRO (µg/L)
03-416 Downgradient	2001	**3,450**
	2003	790
	2004	1,160
	2005	NP
	2006	**1,500**
	2007	NP
	2008	1,400 Y
	2009	NP
	2010	1,300 Y
	2011	NP
	2012	NP
	2013	**1,600 Y**
03-420 Plume Source Area	2001	**12,300**
	2002	**4,900**
	2003	**4,900**
	2004	**5,450**
	2005	**5,650 J**
	2006	**3,800**
	2007	**2,400 Y**
	2008	**3,300 Y**
	2009	**2,200 Y**
	2010	NP
	2011	**4,300 Y**
	2012	NP
	2013	**3,300 Y**
03-421 Plume Source Area	2001	**81,300 J**
	2002	**3,500**
	2006	**FP**
	2007	**FP**
	2008	**FP**
	2009	**15,000 Y**
	2010	**3,800 Y**
	2011	**19,000 Y**
	2012	NP
	2013	**3,000 Y**
03-890 Plume Source Area	2001	**90,600 J**
	2002	**16,000**
	2006	**FP**
	2007	**FP**
	2008	**FP**
	2009	**44,000 YJ**
	2010	**10,000 Y**
	2011	**13,000 Y**
	2012	NP
	2013	**11,000 Y**
Endpoint Criteria		1,500

Note:
Bold indicates reported concentration is greater than the endpoint criteria.

10.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a). Trend evaluation was conducted only for analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. The Sen's evaluation was conducted only for wells with decreasing trends. The results of the Mann-Kendall and Sen's trend evaluations are presented in Table 10-3. Worksheets and graphs are provided in Appendix H.

Based on the statistical evaluation:

- Well 03-416: The DRO concentration exhibited no trend at either the 80 or 95 percent confidence intervals, with the coefficient of variation indicating the data is stable.
- Well 03-420: The DRO concentration exhibited a decreasing trend at the 80 percent confidence interval. The Sen's evaluation indicates a statistically significant downward trend whose median slope is -367.
- Well 03-421: The DRO concentration exhibited no trend at either the 80 or 95 percent confidence intervals, with the coefficient of variation indicating the data is not stable.
- Well 03-890: The DRO concentration exhibited a decreasing trend at the 80 percent confidence interval. The Sen's evaluation did not indicate a statistically significant trend.

10.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring results performed at the Housing Area (Arctic Acres) site in 2013. The conclusions are as follows:

- Groundwater Flow: The groundwater flow direction at the site is interpreted to be to the northeast in 2013.
- MNA: The groundwater parameters obtained during the 2013 LTM event support evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- No free product was detected in any well at this site in 2013.
- Well 03-416: The DRO concentration has been above the endpoint criterion three times in this well since sampling began in 2001, including 2013. The trend analysis performed indicates that the concentration is stable with no statistically significant trend.

- Well 03-420: The DRO concentration has been above the endpoint criterion in this well since sampling began in 2001. The Mann-Kendall and Sen's trend analyses indicate that the DRO concentration has a statistically significant decreasing trend at the 80 percent confidence level.
- Well 03-421: The DRO concentration has been above the endpoint criterion or free product has been observed in this well since sampling began in 2001. The trend evaluation indicates the DRO concentration is not stable with no trend.
- Well 03-890: The DRO concentration has been above the endpoint criterion or free product has been observed in this well since sampling began in 2001. The trend evaluation indicates that DRO is exhibiting a decreasing trend with an 80 percent degree of confidence that is not statistically significant.

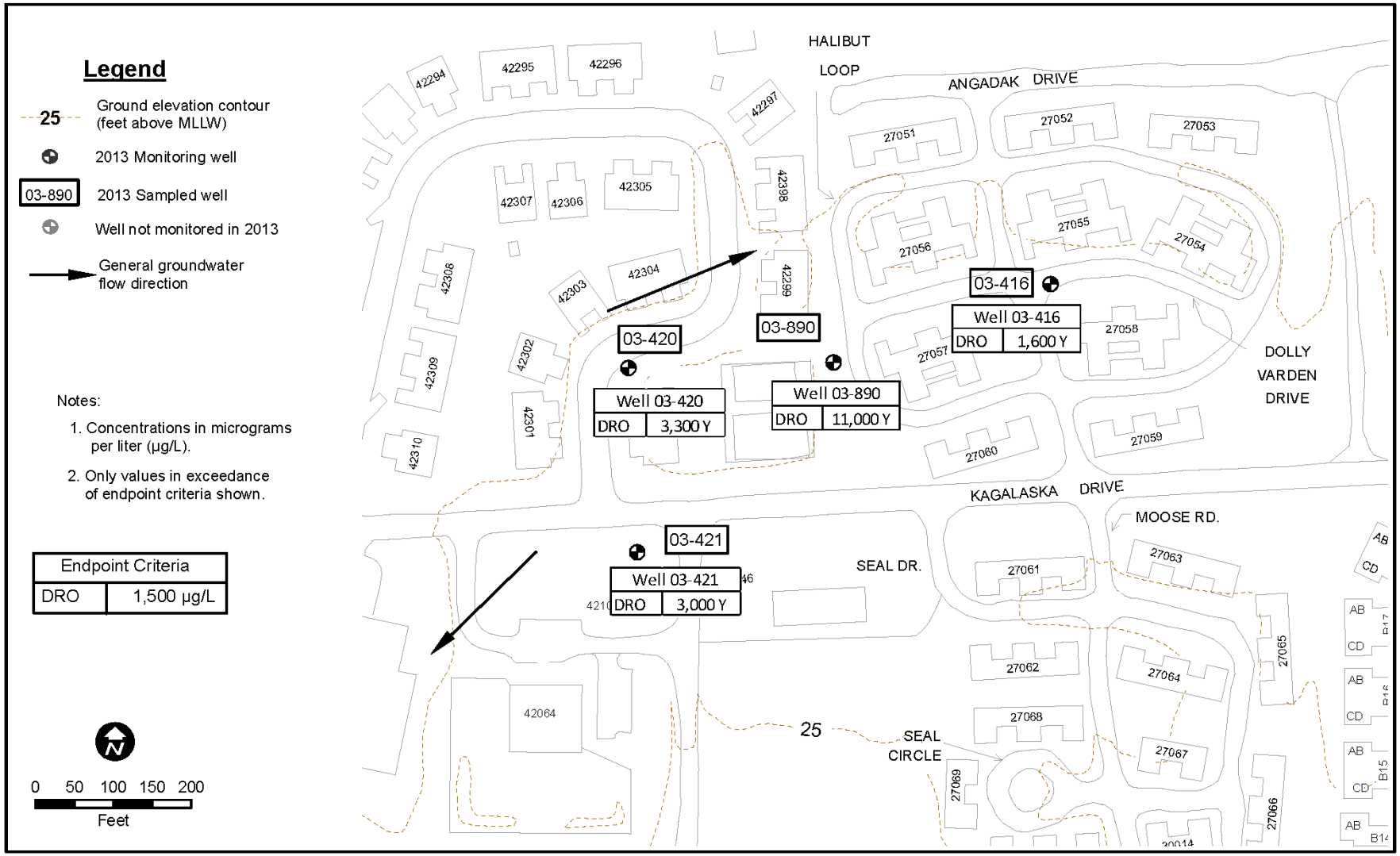
10.6 RECOMMENDATIONS

Because DRO concentrations remain above the endpoint criterion in groundwater samples collected from site wells 03-420, 03-421 and 03-890, monitoring should continue as prescribed.

Table 10-3. Concentration Trend Evaluation for Housing Area (Arctic Acres)

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Two Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
03-416	DRO	Yes	1,600 Y	1,500	7	3	No trend	No trend	Stable	NC	NC	NC	NC
03-420	DRO	Yes	4,300 Y	1,500	10	-19	Decreasing	No Trend	NA	-367	Yes	-783	-178
03-421	DRO	Yes	19,000 Y	1,500	6	-5	No trend	No trend	Non-stable	NC	NC	NC	NC
03-890	DRO	Yes	13,000 Y	1,500	6	-9	Decreasing	No trend	NA	-6,500 [3]	No	-34,000	3,000

Notes:
[1] Endpoint criteria are established from Alaska cleanup levels for groundwater used as a drinking water source.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval.
[3] Data from 2009 to 2013 used for the Sen's slope analysis for this well, since the analysis requires that there cannot be more than two years between consecutive sampling events.



U.S. NAVY	SEALASKA	Figure 10-1 Housing Area (Arctic Acres) Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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11 NMCB BUILDING T-1416 EXPANDED AREA

This section presents the results of groundwater monitoring performed at the NMCB T-1416 Expanded Area (henceforth referred as NMCB) during 2013. The remedy specified for this site in the OU A ROD is interim free product recovery followed by determination of further remedies using the focused feasibility study process. In 2006, the Final Decision Document for the NMCB selected the preferred remedies of ICs, free product recovery and MNA for the site (Navy 2006a). During the contract year 2007/2008, the site met the endpoint criteria for free product recovery of less than a rolling average of 5 gallons per month for 6 months. Monthly free product activities ceased for this site but were restarted in June 2010 to meet surface water protection goals. Annual groundwater monitoring is conducted as part of the prescribed long-term monitoring. Groundwater samples are collected to evaluate groundwater quality relative to specified endpoint criteria in order to verify that natural attenuation is occurring and to monitor for surface water protection.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, an interpretation of groundwater flow direction based on water levels, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, conclusions based on these analyses and recommendations for future monitoring activities at the site. Groundwater at NMCB is not considered to be a potential future water source due to the potential for salt water intrusion, as per Alaska regulations (18 AAC 75.345[b][2]). The endpoint criteria are set at 10 times the 18 AAC 75.345[b][2] Table C groundwater cleanup levels.

11.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at 24 monitoring wells on August 31, 2013. Field measurements were recorded in the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 11-1 provides the measured depths-to-water, the calculated groundwater elevations and if present the product thicknesses. Depth-to-water and groundwater elevations have been corrected for the presence of free product in those wells with detectable thickness (Appendix D-1). Figure 11-1 shows the locations of wells at the site, the site topography, the interpreted groundwater flow direction and the downgradient surface water body (Sweeper Cove).

Table 11-1. 2013 Field Measurements for NMCB

	Physical Measurements				Groundwater Parameters						
Well Location	Casing Elevation (ft MLLW)	Depth-to-Water (ft BTOC)	Groundwater Surface Elevation (ft MLLW)	Measured Product Thickness (ft)	pH (SU)	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Salinity (%)	ORP (mV)
02-300	11.99	9.95[1]	2.04	0.44	NP	NP	NP	NP	NP	NP	NP
02-301	14.87	12.36	2.51	0	NP	NP	NP	NP	NP	NP	NP
02-451	10.99	8.51	2.48	0	6.28	0.901	0.0	2.72	8.86	0.04	107
02-452	11.94	9.32	2.62	0	NP	NP	NP	NP	NP	NP	NP
02-453	11.68	9.19	2.49	0	NP	NP	NP	NP	NP	NP	NP
02-455	14.08	11.53	2.55	0	NP	NP	NP	NP	NP	NP	NP
02-461	9.41	6.74	2.67	0	5.93	1.48	2.5	0.00	7.73	0.07	-72
02-463	12.58	9.71	2.87	0	NP	NP	NP	NP	NP	NP	NP
02-478	10.24	7.83	2.41	0	NP	NP	NP	NP	NP	NP	NP
02-479	16.25	12.78	3.47	0	6.29	0.241	4.8	6.93	9.64	0.01	177
02-497	9.15	6.69	2.46	0	NP	NP	NP	NP	NP	NP	NP
02-815	16.35	13.90	2.46	0	NP	NP	NP	NP	NP	NP	NP
02-816	12.86	10.60	2.45	0	NP	NP	NP	NP	NP	NP	NP
02-817	12.49	9.95	2.26	0	NP	NP	NP	NP	NP	NP	NP
02-818	11.55	8.98	2.54	0	6.32	0.245	0.7	0.00	8.74	0.01	-102
02-819	10.03	7.33	2.57	0	NP	NP	NP	NP	NP	NP	NP
E-201	15.54	13.22	2.70	0	6.40	0.254	10	1.66	7.03	0.00	-51
NMCB-04	14.49	11.93[1]	2.56	0.43	NP	NP	NP	NP	NP	NP	NP
NMCB-07	11.85	9.31[1]	2.54	0.36	FP	FP	FP	FP	FP	FP	FP
NMCB-08	8.52	5.98	2.54	0	NP	NP	NP	NP	NP	NP	NP
NMCB-09	11.96	9.67	2.29	0	6.29	0.347	0.0	0.00	8.05	0.02	-134
NMCB-10	12.95	10.46[1]	2.49	0.14	FP	FP	FP	FP	FP	FP	FP
NMCB-11	12.05	9.24[1]	2.81	0.03	FP	FP	FP	FP	FP	FP	FP
NMCB-12	16.27	14.18	2.09	0	NP	NP	NP	NP	NP	NP	NP

Notes:
[1] Corrected for presence of free product in the well.
The reported casing elevation is the surveyed elevation residing in the NIRIS database. The last groundwater parameter measurement prior to sample collection is reported.

The historic water level data indicate that a groundwater high, or divide, occurs in the main aquifer beneath the site parallel to Seawall Road. The groundwater south of Seawall Road flows south toward Sweeper Cove. North of Seawall Road, the groundwater flows to the northwest, toward East Canal. Groundwater elevations collected in 2013 were compared with historical data and are consistent with this interpretation. The wells along the Sweeper Cove shoreline are influenced by tidal fluctuations.

A total of six groundwater samples were collected from onsite wells on September 2 and 3, 2013. A review of the sampling data reported for this site indicates that groundwater parameters stabilized at all monitoring wells. Table 11-1 lists the final water quality parameters measurements recorded at each monitoring well prior to sample collection.

Measurable free product was detected in wells 02-300 (0.44 feet), NMCB-04 (0.43 feet), NMCB-07 (0.36 feet), NMCB-10 (0.14 feet) and NMCB-11 (0.03 feet). Sampling was not performed at wells NMCB-07, NMCB-10 or NMCB-11 as planned per the CMP since product thickness equaled or exceeded 0.02 feet. Periodic product recovery activities were performed at this site from October 2012 through September 2013. Approximately 4.24 gallons of free product was removed from site wells during this time period (see Appendix J). Product recovery activities are described in further detail in the Remedial Action Summary Report, Free Product Recovery (Navy 2014).

An inspection was conducted along the shoreline of Sweeper Cove between wells 02-451 and 02-479 (Figure 9-1). No evidence of petroleum contamination was observed along the shoreline. A shoreline sediment sample was collected downgradient of well NMCB-07 because of observations of petroleum odor during past shoreline inspections. Sediment sample NL-05 was collected at this location for analysis of DRO. No petroleum odors or visible evidence of contamination was observed at the sediment location. Results of shoreline inspections are summarized in Section 4.1.3.

11.2 TARGET ANALYTE RESULTS

Six groundwater samples were collected and analyzed for GRO. Sediment sample NL-05 was collected from the shoreline downgradient of well NMCB-07 and also analyzed for GRO. Figure 11-1 shows the locations of the wells sampled, the sediment sample location and the analytical results for samples exceeding the applicable endpoint criteria. The general upland area of the dissolved contaminant plume currently exceeding the applicable endpoint criteria is shown on Figure 11-1. Table 11-2 presents the groundwater analytical results since 2006 for all site monitoring wells. Table 11-3 presents the sediment analytical results.

Table 11-2. Analytical Results for Petroleum-Related Chemicals at NMCB

Well Location	Year	GRO (µg/L)
02-451	2006	25 U
Plume Edge	2007	100 U
	2008	100 U
	2009	100 U
	2010	100 U
	2011	100 U
	2012	NP
	2013	14 J
02-461	2006	9,900
Plume Source Area	2007	**14,000 DY**
	2008	8,600 Y
	2009	10,000 DY
	2010	9,500 DY
	2011	**14,000 DY**
	2012	7,800 Y
	2013	7,000 Y
02-479	2006	25 U
Surface Water Protection Well	2007	100 U
	2008	100 U
	2009	100 U
	2010	30 J
	2011	100 U
	2012	NP
	2013	100 U
02-818	2006	**FP**
Plume Edge	2007	9,600 DY
	2008	9,700 Z
	2009	9,100 DY
	2010	**FP**
	2011	9,700 DY
	2012	**FP**
	2013	6,900 Y
E-201	2006	**14,000**
Plume Edge	2007	13,000 DY
	2008	9,400 DY
	2009	11,000 DY
	2010	13,000 DY
	2011	**17,000 DY**
	2012	9,900 Y
	2013	7,900 Y
NMCB-07	2006	**FP**
Plume Source Area	2007[2]	**17,000 DY**
	2008	**FP**
	2009	**FP**
	2010	**FP**
	2011	**FP**
	2012	**FP**
	2013	**FP**
Endpoint Criteria[1]		13,000

Table 11-2. Analytical Results for Petroleum-Related Chemicals at NMCB (continued)

Well Location	Year	GRO (µg/L)
NMCB-09	2006	470
Surface Water Protection Well	2007	330 Y
	2008	580 H
	2009	430 Y
	2010	360 Y
	2011	360 H
	2012	NP
	2013	210 Y
NMCB-10	2006	4,700
Plume Source Area	2007	4,600 DY
	2008	3,400 Y
	2009	**FP**
	2010	**FP**
	2011	4,300 Y
	2012	**FP**
	2013	**FP**
NMCB-11	2006	25 U
Surface Water Protection Well	2007	27 J
	2008	17 J
	2009	18 J
	2010	19 J
	2011	19 J
	2012	100 U
	2013	**FP**
Endpoint Criteria[1]		13,000

Notes:
[1] The endpoint criteria are 10 times the ADEC cleanup levels for groundwater as a drinking water source and as specified in 18 AAC 75.345[b][1], Table C.
[2] Indicates well had 0.02 feet or greater of product that was bailed off prior to sampling; results are potentially elevated due to presence of free product.
Bold indicates reported concentration is greater than the endpoint criteria.

Table 11-3. Analytical Results for Sediment at NMCB

Location	Year	GRO (mg/kg)
NL-05	2009	7.0 U
	2010	6.8 U
	2011	6.4 U
	2012	5.4 U
	2013	1.6 U[1]
Endpoint Criteria[2]		12.2

Notes:
[1] Value is the method detection limit because the quantitation limit is greater than the risk-based endpoint criteria.
[2] Endpoint criteria for East Canal have not been established so endpoints for South Sweeper Creek were used.

The historical analytical results obtained for these locations are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

11.3 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a). Trend evaluation was conducted only for analytes that exceeded the endpoint criteria within the last three sampling events and had a minimum of four data points. Sen's evaluations were performed on decreasing trends only. The results of the trend evaluation performed for this site are presented in Table 11-4. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well 02-461: The GRO concentration exhibited a decreasing trend at the 80 percent confidence interval. The Sen's evaluation did not indicate a statistically significant trend.
- Well E-201: The GRO concentration exhibited a decreasing trend at the 80 percent confidence interval. The Sen's evaluation did not indicate a statistically significant trend.

Table 11-4. Concentration Trend Evaluation for NMCB

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Three Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
02-461	GRO	No	7,800 Y	13,000	8	-11	Decreasing	No trend	NA	-457	No	-833	0
E-201	GRO	No	9,900 Y	13,000	8	-9	Decreasing	No trend	NA	-651	No	-1,000	125

Notes:
[1] Endpoint criteria are established from risk-based cleanup levels.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.

11.4 CONCLUSIONS

This section presents the conclusions based on a review of analytical results obtained for groundwater monitoring conducted at the NMCB during 2013. The conclusions are as follows:

- Groundwater Flow: The interpreted groundwater flow direction in September 2013 is south toward Sweeper Cove and northwest toward East Canal north of Seawall Road.
- MNA: The groundwater parameters obtained during the 2013 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Measurable free product was detected in five site wells: 02-300 (0.44 feet), NMCB-04 (0.43 feet), NMCB-07 (0.36 feet), NMCB-10 (0.14 feet) and NMCB-11 (0.03 feet). Periodic free product recovery from October 2012 through September 2013 recovered 4.24 gallons of product from the site.
- Well 02-451: This well is located cross-gradient to the contaminant plume. The GRO concentration has not been detected above the quantitation limit since sampling began in 2006 (seven sampling events).
- Well 02-461: This well is located on the upgradient edge of the contaminant plume. GRO was detected at a concentration above the endpoint criteria in 2007 and 2011, however the concentration dropped below endpoint criteria for two consecutive events in 2012 and 2013. The Mann-Kendall test indicated a decreasing concentration trend, however the Sen's evaluation indicated that the trend was not statistically significant.
- Well 02-479: The GRO concentration at this surface water protection well has remained below the quantitation limit since sampling began in 2006 (seven sampling events). This well is located cross-gradient to the plume.
- Well 02-818: This well is located on the western edge of the contaminant plume. The GRO concentration was below the endpoint criteria in 2013. Free product has been detected in this well during the LTM events at a thickness greater than or equal to 0.02 feet three times since sampling commenced in 2006.
- Well E-201: This well is located upgradient of the contaminant plume north of Seawall Road. GRO was detected at a concentration above the endpoint criteria of 13,000 µg/L in 2011 but has been below the endpoint criteria in 2012 and 2013. The Mann-Kendall test indicated a decreasing concentration trend, however the Sen's evaluation indicated that the trend was not statistically significant.

- Well NMCB-07: This well is located within the contaminant plume. The well was not sampled due to the presence of free product measuring 0.36 feet in thickness.
- Well NMCB-09: This well is a surface water protection well located between two areas of endpoint exceedances. GRO has not exceeded endpoint criteria in this well since 2006.
- Well NMCB-10: This well is located within the contaminant plume. The well was not sampled due to the presence of free product measuring 0.14 feet in thickness.
- Well NMCB-11: This well is located within the contaminant plume. The well was not sampled due to the presence of free product measuring 0.03 feet in thickness. This was the first observance of free product greater than or equal to 0.02 feet since sampling began in 2006. GRO has also not exceeded endpoint criteria during this time frame.
- Sediment sample NL-05: GRO has not been detected since sampling began in 2009. This sample was collected from the shoreline downgradient of well NMCB-07. No visible observations of petroleum contamination were noted during sample collection.
- The shoreline inspection of Sweeper Cove between wells 02-451 and 02-479 did not reveal any groundwater seeps, odors, sheen or discoloration that indicated petroleum contamination.

11.5 RECOMMENDATIONS

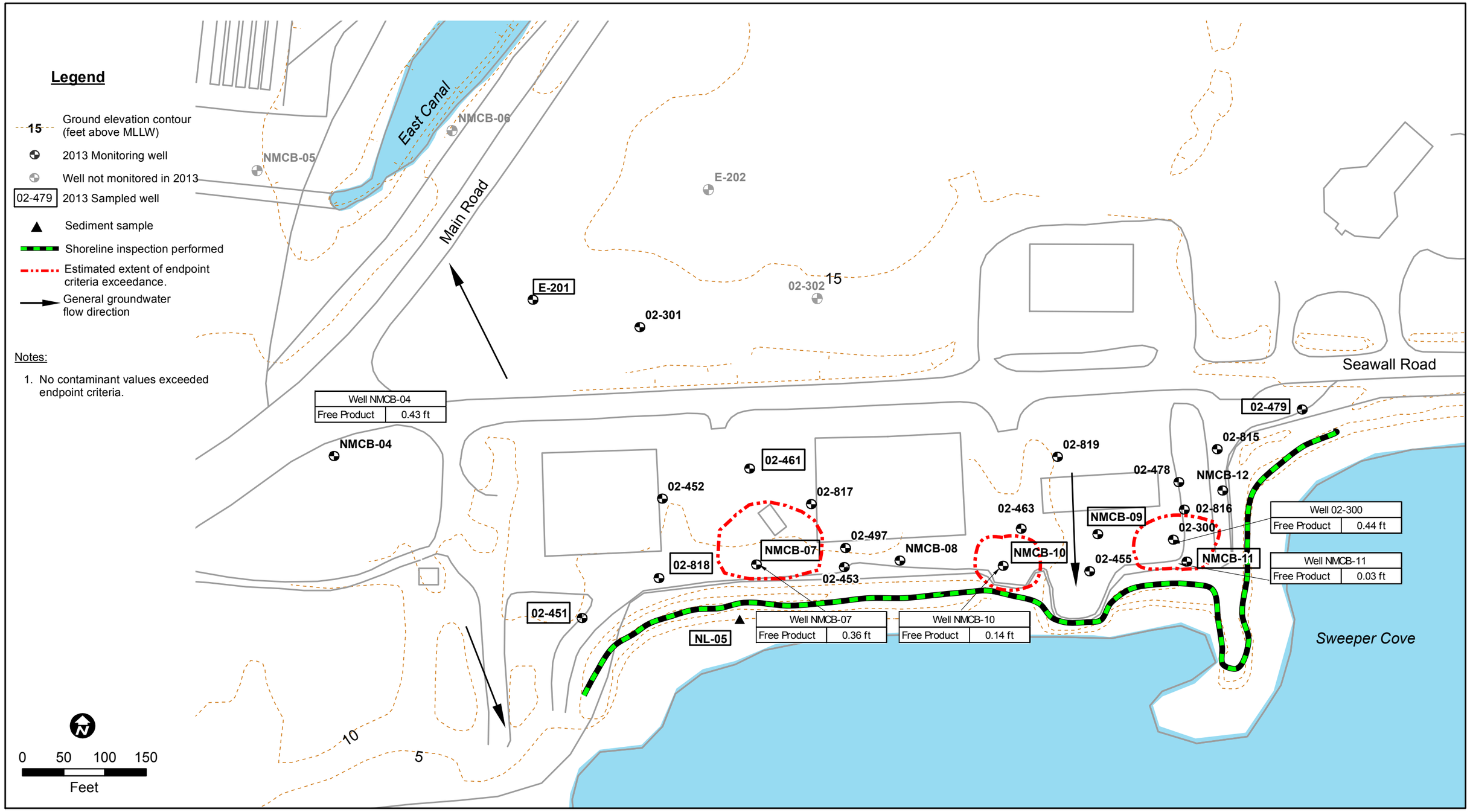
No sample collected from NMCB Expanded Area exceeded contaminant endpoint criteria. However, three areas of floating free product were observed that encompass well NMCB-07; well NMCB-10; and wells 02-300 and NMCB-11 (Figure 11-1). These areas have reduced in size compared to that observed in 2012. Additionally, concentrations of GRO in groundwater show decreasing trends at two wells onsite.

Two wells, 02-479 and 02-451, are located west and east, respectively of the contaminant plumes. GRO has not exceeded quantitation limits for seven sampling events in either well. Because of this and because the areas of free product have diminished, it is recommend that sampling at these wells be discontinued. Because free product was observed in adjacent wells 02-815 and 02-818 in 2012, it is further recommended that monitoring at wells 02-479 and 02-451 continue as prescribed.

Because areas of free product appear to be diminishing; because GRO concentrations are decreasing in site groundwater and because GRO has not been detected in sediment since sampling began in 2009 (five consecutive sampling events), it is recommended that sampling sediment at NL-05 be discontinued.

All other site monitoring is recommended to continue as prescribed due to the following:

- The continued observance of free product in six site wells during periodic recovery activities from October 2012 through September 2013 (Appendix J);
- Decreasing concentrations of GRO in groundwater; and
- The tidal influence on groundwater flow beneath the site.



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U.S. NAVY	SEALASKA	Figure 11-1 NMCB Building T-1416 Expanded Area Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

12 ROICC CONTRACTOR'S AREA, UST ROICC-7

This section presents the results of groundwater monitoring performed at the ROICC Contractor's Area, UST ROICC-7 site during 2013. Limited groundwater monitoring was the remedy selected for this site (Navy, ADEC and EPA 2000); however, monitoring results obtained between 1999 and 2003 identified benzene concentrations in groundwater above the determined endpoint criteria. Therefore, the remedy was changed to MNA in response to a recommendation in the 5-year review. Groundwater samples are collected from these wells to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345) and to verify that natural attenuation is occurring.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentrations on data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

12.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at two wells on September 4, 2013. Table 12-1 provides the measured depths-to-water, the calculated groundwater elevations and if present the product thicknesses. Figure 12-1 shows the locations of the wells at ROICC Contractor's Area, UST ROICC-7, the site topography and the approximate groundwater flow direction. The historic water level data indicate that the groundwater beneath the site flows to the southeast. Groundwater elevations collected in 2013 were compared with historical data and are consistent with this interpretation. Free product was not observed in any of the wells in 2013.

Groundwater sampling was performed at the two scheduled monitoring wells on September 4 and 5, 2013. Field measurements were recorded on the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 12-1 lists the final field measurements recorded at the monitoring wells prior to sample collection. A review of the sampling data reported for this site indicates that prior to sample collection all groundwater parameters stabilized in all wells.

Table 12-1. 2013 Field Measurements for ROICC Contractor's Area, UST ROICC-7

	Physical Measurements				Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
08-200	14.87	4.05	10.82	0	6.46	1.14	0	2.90	10.29	0.06	-25
08-202	13.86	2.70	11.16	0	6.54	0.820	0	0.50	6.94	0.04	-98

Notes:
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

12.2 TARGET ANALYTE RESULTS

Groundwater samples collected from wells 08-200 and 08-202 and were analyzed for benzene. Table 12-2 presents the historical analytical results for the two site monitoring wells. The historical analytical results obtained for these locations are also summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F. Figure 12-1 shows the locations of the site wells and the analytical results that exceed the applicable endpoint criteria.

Benzene was detected above the endpoint criteria (5 µg/L) in the 2013 samples collected from wells 08-200 and 08-202 at concentrations of 260 µg/L and 9.3 µg/L, respectively.

Table 12-2. Analytical Results for Petroleum-Related Chemicals for ROICC Contractor's Area, UST ROICC-7

Well Location	Year	Benzene (µg/L)
08-200 Plume Source	2003	**390**
	2004	**288J**
	2005	**233 J**
	2006	**250**
	2007	**300 D**
	2008	**320 D**
	2009	**310 D**
	2010	**310 JD**
	2012	**280 D**
	2013	**260 JD**
08-202 Onsite	2003	**24**
	2004	**16**
	2005	**14.6**
	2006	**13 J**
	2007	**14**
	2008	**16**
	2009	**12**
	2010	**12**
	2012	**9.6**
	2013	**9.3**
Endpoint Criteria		5

Note:
Bold indicates reported concentration is greater than the endpoint criteria.

12.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that biodegradation of petroleum hydrocarbons is likely occurring by iron (II) reduction; sulfate reduction; and methanogenesis as shown by elevated ferric iron concentration,

depleted sulfates and elevated methane concentrations in comparison to background conditions. Groundwater parameters presented in Table 12-1 collected during the 2013 LTM event support evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and depleted dissolved oxygen (0.5 mg/L) within the plume. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

12.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012e). Trend evaluation was conducted only for analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. Sen's evaluations were performed on decreasing trends only. The results of the trend evaluation performed for this site are presented in Table 12-3. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well 08-200: The benzene concentration exhibits no trend at the 80 and 95 percent confidence intervals. The coefficient of variation indicates the concentration is stable.
- Well 08-202: The benzene concentration exhibits a decreasing trend at both the 80 and 95 percent confidence intervals. The Sen's evaluation also indicates a statistically significant downward trend (at the 80 percent confidence interval), with a median slope of -0.89.

12.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring results performed at the ROICC Contractor's Area (UST ROICC-7) site in 2013. The conclusions are as follows:

- Groundwater Flow: The approximate groundwater flow direction in 2013 at the site is to the southeast.
- MNA: The groundwater parameters obtained during the 2013 LTM event support evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- No free product was detected in the two wells monitored at this site in 2013.

Table 12-3. Concentration Trend Evaluation for ROICC Contractor's Area, UST ROICC-7

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Two Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
08-200	Benzene	Yes	280 D	5	10	-4	No trend	No trend	Stable	NC	NC	NC	NC
08-202	Benzene	Yes	9.6	5	10	-35	Decreasing	Decreasing	NA	-0.88	Yes	-1.11	-0.75

Notes:
[1] Endpoint criteria are established from ADEC cleanup levels for groundwater used as a drinking water source.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.

- Well 08-200: This well is located within the contaminant plume. Benzene was detected above the endpoint criteria in 2013. The trend evaluation performed on the benzene data collected between 2003 and 2013 shows a stable benzene concentration with no trend at both the 80 and 95 percent confidence intervals.
- Well 08-202: This well is located within the contaminant plume on the upgradient edge. Benzene was detected above the endpoint criteria in 2013. The statistical evaluation performed on the benzene data collected between 2003 and 2013 shows a decreasing trend at both the 80 and 95 percent confidence intervals. The Sen's evaluation verifies that benzene is decreasing with statistical significance in this well.

12.6 RECOMMENDATIONS

Because the benzene concentration remains above the endpoint criteria in monitoring wells 08-200 and 08-202, but exhibits stable or decreasing trends, monitoring at the site is recommended to continue as prescribed.

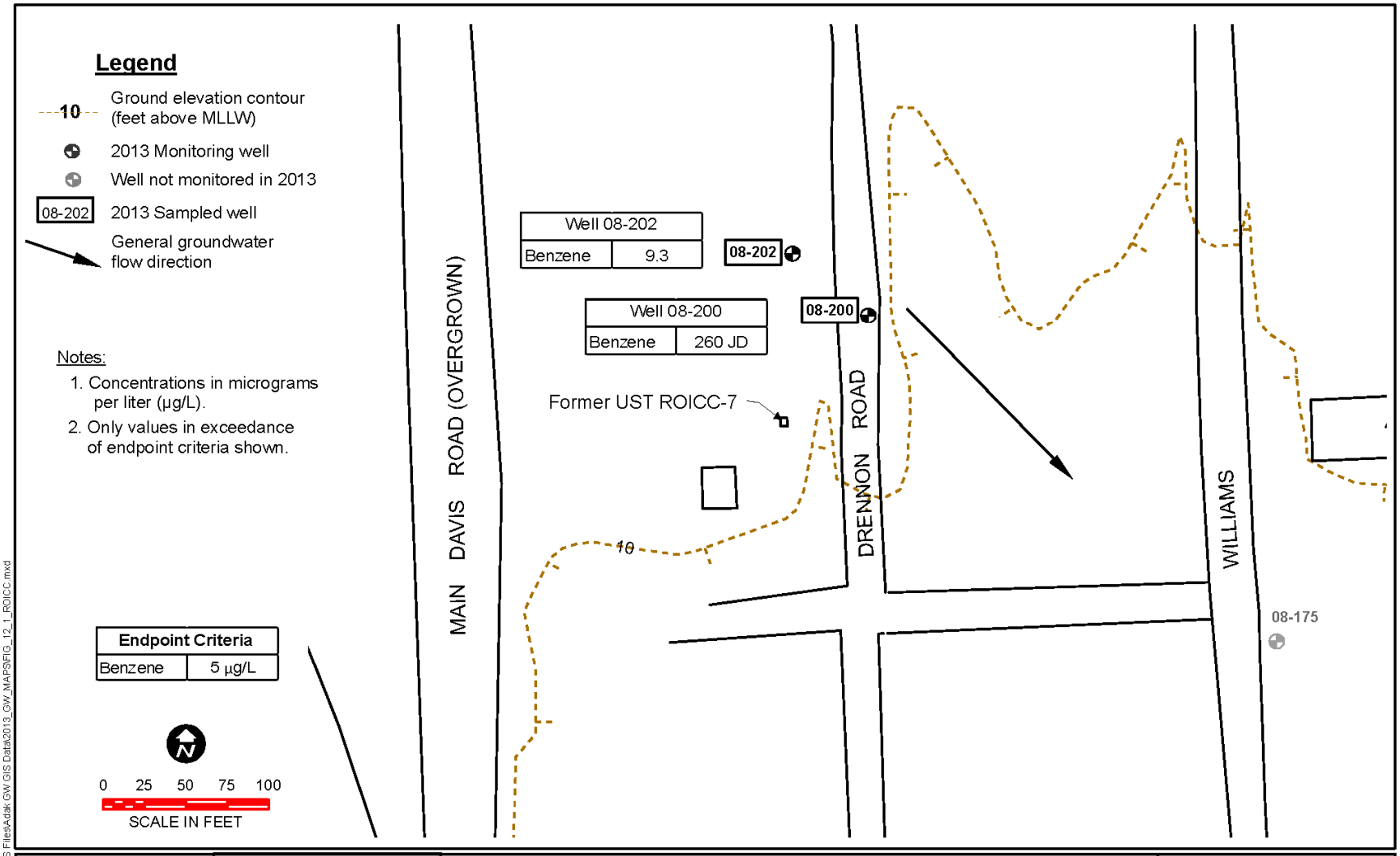

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Figure 12-1
ROICC Contractor's Area
UST ROICC-7
Sample Locations

Task Order 66
Adak Island, AK
2013 Annual Groundwater and Landfill Monitoring Report

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13 RUNWAY 5-23 AVGAS VALVE PIT

This section presents the results of groundwater monitoring performed at the Runway 5-23 Avgas Valve Pit site during 2013. MNA is the remedy selected for this site (Navy, ADEC and EPA 2000). To comply with requirements specified for this remedy, the Navy conducts periodic groundwater sampling and water level/product thickness monitoring. A groundwater sample is collected from one well to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345) and to verify that natural attenuation is occurring.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentrations on data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

13.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at one well on September 7, 2013. Table 13-1 provides the measured depth-to-water, the calculated groundwater elevation and if present the product thickness. Figure 13-1 shows the location of the well at the Runway 5-23 Avgas Valve Pit and the site topography. The potentiometric surface and groundwater flow direction cannot be determined based on only one well; however, the topography of the site and regional groundwater flow patterns indicate that the groundwater flow direction is likely east toward South Sweeper Creek.

Groundwater sampling was performed at the monitoring well on September 7, 2013. Field measurements were recorded on the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 13-1 lists the final field measurements recorded at the monitoring well prior to sample collection. A review of the sampling data reported for this site indicates that prior to sample collection all groundwater parameters stabilized in the well. No free product was observed in the well during the 2013 field monitoring activities.

Table 13-1. 2013 Field Measurements for Runway 5-23 Avgas Valve Pit

	Physical Measurements				Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
14-100	15.06	2.75	12.31	0	6.33	0.332	0	0.00	9.01	0.01	-31

Notes:
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

13.2 TARGET ANALYTE RESULTS

The groundwater sample collected from well 14-100 was analyzed for GRO. Table 13-2 presents the historical analytical results for the site monitoring well. The historical analytical results obtained for this location are also summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F. Figure 13-1 shows the location of the site well and the analytical results that exceed the applicable endpoint criteria. GRO was detected below the endpoint criteria (2,200 µg/L) in well 14-100 at a concentration of 1,600 µg/L.

Table 13-2. Analytical Results for Petroleum-Related Chemicals for Runway 5-23 Avgas Valve Pit

Well Location	Year	GRO (µg/L)
14-100	2003	1,000 J
Plume Source	2004	**3,910**
	2005	1,770
	2006	**3,400**
	2007	**2,000 Y**
	2008	**3,200 Z**
	2009	**3,500 Z**
	2010	2,200 Y
	2012	1,800 Y
	2013	1,600 Z
Endpoint Criteria		2,200

Note:
Bold indicates reported concentration is greater than the endpoint criteria.

13.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that biodegradation of petroleum hydrocarbons is likely occurring by iron (II) reduction; sulfate reduction; and strong evidence of methanogenesis as shown by elevated ferric iron concentration, depleted sulfates and elevated methane concentrations in comparison to background conditions. Groundwater parameters presented in Table 13-1 collected during the 2013 LTM event supports evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and depleted dissolved oxygen (0.0 mg/L) at the site. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

13.4 TREND EVALUATION

Statistical trend evaluations are conducted only for target analyte concentrations in groundwater that have exceeded endpoint criteria within the last two sampling events, in accordance with the CMP, Revision 5 (Navy 2012a). Therefore, no trend evaluation was conducted for this site in 2013.

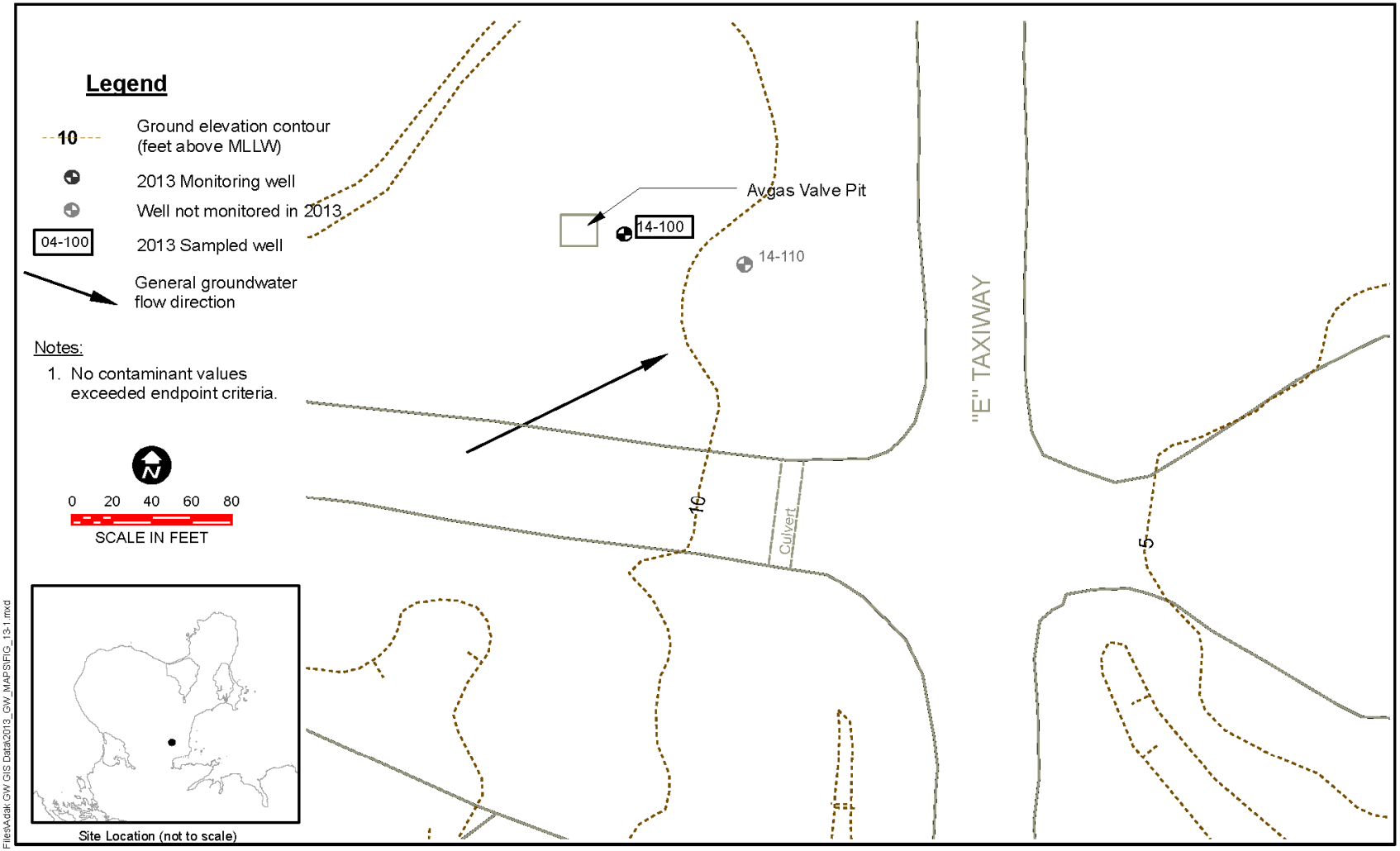
13.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring results performed at the Runway 5-23 Avgas Valve Pit site in 2013. The conclusions are as follows:

- Groundwater Flow: The groundwater flow direction in 2013 at the site is interpreted to be to the east.
- MNA: The groundwater parameters obtained during the 2013 LTM event support evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- No free product was detected in the well at this site in 2013.
- Well 14-100: This well is located within the contaminant plume. GRO was detected at a concentration below the endpoint criteria in 2013. This is the third consecutive event below endpoint criteria, therefore no statistical trend analysis was performed.

13.6 RECOMMENDATIONS

GRO has remained below the endpoint criteria in well 14-100 for three sampling events; therefore, it is recommended that monitoring at this site be discontinued and that the site receive closure from ADEC.



U.S. NAVY	SEALASKA	Figure 13-1 Runway 5-23 Avgas Valve Pit Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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14 SA 79, MAIN ROAD PIPELINE, SOUTH END

This section presents the results of groundwater monitoring performed at SA 79, Main Road Pipeline, South End during 2013. Limited groundwater monitoring is the OU A ROD-specified remedy for the south end of the site (Navy, ADEC and EPA 2000). The north end of the site achieved endpoint criteria and received closure from ADEC in 2004; however, the south end did not achieve limited groundwater monitoring endpoint criteria and was reverted to a natural attenuation evaluation. To comply with requirements specified for these remedies, the Navy conducts periodic groundwater sampling and water level/product thickness monitoring. Groundwater samples are collected from these wells to evaluate groundwater quality relative to ADEC groundwater cleanup levels (18 AAC 75.345), to determine whether natural attenuation is occurring at the south end of the site and to monitor for surface water protection.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

14.1 FIELD MEASUREMENTS

Three monitoring wells at this site were gauged and sampled. Depth-to-water and product thickness measurements were collected at the wells on September 5, 2013 (Table 14-1). Well 02-230 was monitored for surface water protection purposes. Figure 14-1 shows the location of monitoring wells, land surface topography and Sweeper Cove. Table 14-1 provides the measured depths-to-water and the calculated groundwater elevations. Based on the analysis of historical water level measurements and the hydrogeological setting of the site, the groundwater flow direction is to the east-southeast toward Sweeper Cove. Groundwater elevations collected in 2013 were compared with historical data and are consistent with this interpretation. Measurable free product was not observed in any of the wells in 2013.

Field measurements were recorded on field forms during monitoring well sampling activities (Appendix A). Table 14-1 lists the final field measurements recorded at each monitoring well prior to sample collection. A review of the sampling data reported for this site indicates that prior to sample collection groundwater parameters stabilized in all wells.

Table 14-1. 2013 Field Measurements for SA 79, Main Road Pipeline, South End

	Physical Parameters				Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
02-230	13.69	11.44	2.25	0	6.22	0.577	0	0.00	7.95	0.03	-33
601	13.77	11.03	2.74	0	6.07	0.317	0	0.00	9.20	0.01	-84
MRP-MW8	12.72	10.11	2.61	0	6.20	0.332	0	0.00	6.55	0.02	-47

Notes:
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

Because DRO concentrations in groundwater samples collected from wells 02-230 and MRP-MW8 have been greater than the endpoint criteria (1,500 µg/L) since 2001, a visual inspection of the Sweeper Cove shoreline from well MRP-MW8 to the mouth of South Sweeper Creek was conducted in 2013. The purpose of the inspection was to identify groundwater or petroleum seeps on the shoreline, or sheens on the surface water of Sweeper Cove. No seeps, sheens, odors, discolorations or evidence of contamination were observed during the shoreline inspection. Shoreline inspection and results are summarized in Section 4.1.3.

14.2 TARGET ANALYTE RESULTS

The groundwater samples collected from all wells were analyzed for DRO. Figure 14-1 shows the locations of the wells sampled and the analytical results that exceed the applicable endpoint criteria. Table 14-2 presents the analytical results. The historical analytical results obtained for these locations are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

DRO was detected above the endpoint criteria (1,500 µg/L) in samples collected from all three wells MRP-MW8 (3,600 µg/L), 601 (1,900 µg/L) and 02-230 (3,500 µg/L).

14.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that biodegradation of petroleum hydrocarbons is possibly occurring by aerobic digestion; iron (II) reduction; and weak evidence of methanogenesis as indicated by reduced dissolved oxygen levels, weakly elevated ferric iron concentrations and slightly elevated methane concentrations in comparison to background conditions. Groundwater parameters collected during the 2013 LTM event, which are presented in Table 14-1, support evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and depleted dissolved oxygen (0.0 mg/L) within the plume at the site. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

Table 14-2. Analytical Results for Petroleum-Related Chemicals for SA 79, Main Road Pipeline, South End

Well Location	Year	DRO (µg/L)
MRP-MW8 Plume Source Area	2001	**2,790**
	2002	**2,700**
	2003	**3,600**
	2004	**3,890**
	2005	**3,700**
	2006	**4,300**
	2007	**4,700 Y**
	2008	**3,400 Y**
	2009	**3,000 Y**
	2010	**2,700 Y**
	2011	**3,700 Y**
	2012	**3,900 Y**
	2013	**3,600 Y**
601 Plume Source Area	2011	**2,100 Y**
	2012	**1,800 Y**
	2013	**1,900 Y**
02-230 Surface Water Protection Well	2001	**4,230**
	2002	**3,500**
	2003	**3,900**
	2004	**5,760**
	2005	**4,060 J**
	2006	**5,500**
	2007	**4,800 Y**
	2008	**5,000 Y**
	2009	**2,400 Y**
	2010	**4,000 Y**
	2011	**4,200 Y**
	2012	**3,200 Y**
	2013	**3,500 Y**
Endpoint Criteria		1,500

Note:
Bold indicates reported concentration is greater than the endpoint criteria.

14.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a). Trend evaluation was conducted only for analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. The results for the trend evaluation performed for this site are summarized in Table 14-3. Worksheets and graphs are provided in Appendix H.

Table 14-3. Concentration Trend Evaluation for SA 79, Main Road Pipeline, South End

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Two Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
MRP-MW8	DRO	Yes	3,900 Y	1,500	10	-10	No trend	No trend	Stable	NC	NC	NC	NC
02-230	DRO	Yes	3,500 Y	1,500	10	-23	Decreasing	Decreasing	NA	-74	No	-223	23

Notes:
[1] Endpoint criteria are established from ADEC cleanup levels for groundwater used as a drinking water source.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.

The following are the results of the statistical evaluation:

- Well MRP-MW8: The DRO concentration is stable with no trend at the 80 or 95 percent confidence intervals.
- Well 02-230: The Mann-Kendall evaluation for the DRO concentration shows a decreasing trend at both the 80 and 95 percent confidence intervals. However, the Sen's evaluation does not indicate that this trend is statistically significant.

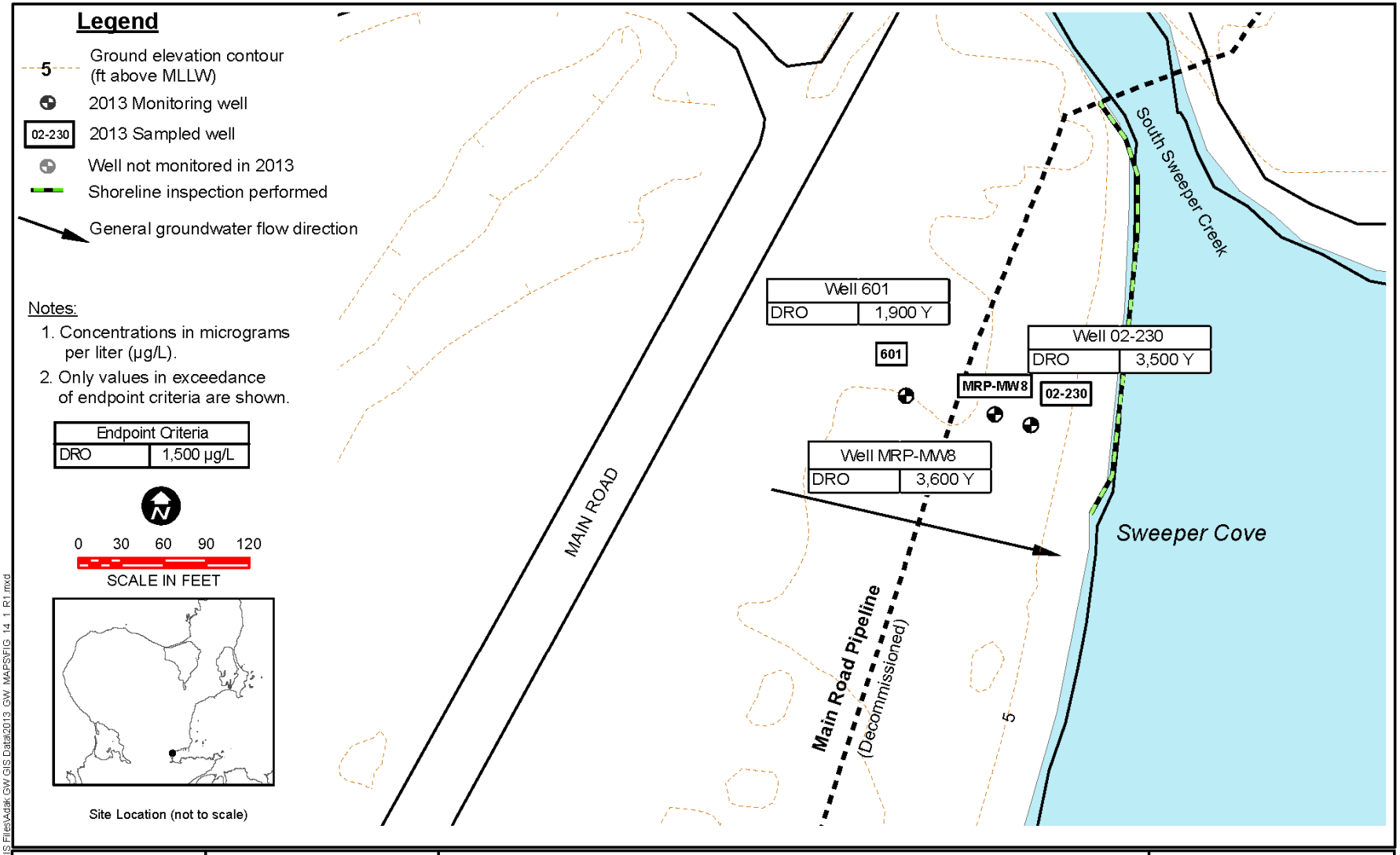
14.5 CONCLUSIONS

This section presents the conclusions based on groundwater monitoring conducted at the SA 79, Main Road Pipeline, South End site in 2013. The conclusions are as follows:

- Groundwater Flow: The estimated groundwater flow direction is to the east toward Sweeper Cove.
- MNA: The groundwater parameters obtained during the 2013 LTM event provide evidence that natural attenuation of petroleum hydrocarbons is occurring at the site.
- No measurable free product was detected in any site well.
- Well MRP-MW8: This well is located within the contaminant plume. DRO has been detected above the endpoint criteria since 2001. The trend evaluation performed on the DRO data collected between 2001 and 2013 exhibits a stable concentration with no trend at the 80 and 95 percent confidence intervals.
- Well 601: This well is located within the contaminant plume. DRO has remained above the endpoint criteria since 2011 when sampling was initiated (three consecutive sampling events).
- Well 02-230: This well is located within the contaminant plume and closest to the shoreline. DRO has been detected above the endpoint criteria since 2001. The trend evaluation performed on the DRO collected between 2001 and 2013 exhibits a decreasing trend in the concentration at the 80 and 95 percent confidence intervals. However, the Sen's evaluation indicates that the decreasing trend is not statistically significant.
- A shoreline inspection in Sweeper Cove downgradient of the site revealed no evidence of petroleum contamination.

14.6 RECOMMENDATIONS

Because of the observed exceedances of DRO above endpoint criteria in wells MRP-MW8, 02-230 and 601, it is recommended that monitoring at this site be continued as prescribed.



U.S. NAVY	SEALASKA	**Figure 14-1** **SA 79, Main Road Pipeline, South End Sample Locations**	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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15 SA 80, STEAM PLANT 4, USTS 27089 AND 27090

This section presents the results of groundwater monitoring performed at SA 80, Steam Plant 4, USTs 27089 and 27090 during 2013. The remedy specified for this site in the OU A ROD is free product recovery (Navy, ADEC and EPA 2000). The Navy and ADEC have selected MNA with ICs as the post-free product recovery remedy for this site (Navy and ADEC 2005). To comply with requirements specified for these remedies, the Navy conducts annual groundwater sampling and water level/product thickness monitoring.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, an interpretation of groundwater flow direction based on water levels, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

15.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at seven monitoring wells on September 4, 2013. Table 15-1 presents the depth-to-water measurements (corrected for product thickness, if present), the calculated groundwater elevations and if present the product thicknesses. Figure 15-1 shows the location of the wells, the site topography and features and the interpreted groundwater flow direction.

A shallow perched aquifer zone has been identified to occur in the area of the removed USTs (Navy 2004). Two wells monitored in 2013 (04-155 and 04-173) have shallow water levels that represent this perched zone. The historic water level data from the remaining wells that are representative of the regional aquifer indicate that the direction of groundwater flow is to the west-southwest, toward East Canal. Groundwater elevations collected in 2013 were compared with historical data and are consistent with this interpretation.

Sampling was conducted at four monitoring wells between September 4 and 6, 2013. Field measurements were recorded on the field forms and in the logbooks during monitoring well sampling activities (Appendix A). Table 15-1 lists the final field measurements recorded at each monitoring well prior to sample collection. A review of the sampling data reported for this site indicates that, prior to sample collection, groundwater parameters stabilized in all the wells sampled.

Table 15-1. 2013 Field Measurements for SA 80, Steam Plant 4

	Physical Measurements				Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
04-155	27.77	15.84[1]	11.93	0.21	NP	NP	NP	NP	NP	NP	NP
04-157	28.18	19.50[1]	8.68	0.01	NP	NP	NP	NP	NP	NP	NP
04-158	27.36	19.71	7.65	0	5.65	0.291	21.0	0.00	7.49	0.01	-25
04-159	29.86	23.55	6.31	0	6.18	0.348	0.0	0.00	7.45	0.02	-86
04-164	28.51	22.22	6.29	0	NP	NP	NP	NP	NP	NP	NP
04-173	27.46	14.78	12.68	0	5.84	0.233	0.0	0.00	6.29	0.01	-76
SP4-3	26.70	20.40	6.30	0	5.89	0.285	0.0	0.00	5.86	0.01	-52

Notes:
[1] Corrected for presence of product in the well.
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

Measurable free product was observed in two of the seven wells: 0.01 feet in well 04-157 and 0.21 feet in well 04-155. Because all product thicknesses were less than 0.5 feet, removal of free product from these wells was not required during the LTM event. Periodic free product recovery activities were performed at this site during October 2012 through September 2013. A total of 0.91 gallons was recovered from site wells during this time period. The periodic free product recovery activities are summarized in Appendix J. Product recovery activities are described in further detail in the Remedial Action Summary Report, Free Product Recovery (Navy 2014).

15.2 TARGET ANALYTE RESULTS

Groundwater samples were collected from wells 04-158, 04-159, 04-173 and SP4-3 in 2013 and analyzed for DRO. Figure 15-1 shows the location of the wells and the analytical results that exceeded the endpoint criteria. Table 15-2 presents the results of these analyses. The historical analytical results obtained for these locations are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

DRO was detected above the endpoint criteria (1,500 µg/L) in samples collected from all four wells 04-158 (7,500 µg/L), 04-159 (3,400 µg/L), 04-173 (3,100 µg/L) and SP4-3 (3,800 µg/L).

15.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data strongly indicated that biodegradation of petroleum hydrocarbons is likely occurring by iron (II) reduction; sulfate reduction; and methanogenesis as shown by elevated ferric iron concentrations, strongly depleted sulfates and strongly elevated methane concentrations in comparison to background conditions. Groundwater parameters presented in Table 15-1 collected during the 2013 LTM event supports evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and depleted dissolved oxygen (0.0 mg/L) within the plume at the site. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

Table 15-2. Analytical Results for Petroleum-Related Chemicals for SA 80, Steam Plant 4

Well Location	Year	DRO (µg/L)
04-158	2003	NP
Plume Source Area	2004	NP
	2005	**7,310 J**
	2006	**FP**
	2007	**FP**
	2008	**FP**
	2009	**FP**
	2010	**13,000 Y**
	2011	**FP**
	2012	**8,700 Y**
	2013	**7,500 Y**
04-159	2003	NP
Plume Source Area	2004	NP
	2005	1,410 J
	2006	**3,900**
	2007	**4,300 Y**
	2008	**9,800 Y**
	2009	**3,800 Y**
	2010	**4,000 Y**
	2011	**5,000 Y**
	2012	**3,200 Y**
	2013	**3,400 Y**
04-173	2003	NP
Plume Source Area	2004	**2,560**
	2005	**FP**
	2006	**FP**
	2007	**FP**
	2008	**FP**
	2009	**FP**
	2010	**3,200 Y**
	2011	**FP**
	2012	**3,900 Y**
	2013	**3,100 Y**
SP4-3	2003	**3,400**
Plume Edge	2004	**5,130**
	2005	**1,670**
	2006	**4,900**
	2007	800 Y
	2008	500 Y
	2009	NP
	2010	**5,700 Y**
	2011	NP
	2012	**3,500 Y**
	2013	**3,800 Y**
Endpoint Criteria		1,500

Note:
Bold indicates reported concentration is greater than the endpoint criteria.

15.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a). Trend evaluation was conducted only for analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. Results of the trend evaluation performed for this site are summarized in Table 15-3. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Wells 04-158, 04-159, 04-173 and SP4-3: The DRO concentration is stable at all four wells with no trend at the 80 or 95 percent confidence intervals.

15.5 CONCLUSIONS

This section presents conclusions based on a review of groundwater monitoring performed at the SA 80, Steam Plant 4, USTs 27089 and 27090 sites in 2013. The conclusions are as follows:

- Groundwater Flow: Based on the field measurements in September 2013, the interpreted groundwater flow direction in the regional aquifer is west-southwest toward the East Canal.
- MNA: The groundwater parameters obtained during the 2013 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Free product was detected in wells 04-155 (0.21 feet) and 04-157 (0.01 feet). Periodic free product recovery from October 2012 through September 2013 recovered 0.91 gallons of product from the site.
- Well 04-158: This well is located within the contaminant plume. Free product was not detected in this well in 2013 but DRO exceeded endpoint criteria. The statistical evaluation of data from the four events collected from 2005 to 2013 showed that the concentration is stable with no statistically significant trend.
- Well 04-159: This well is located within the contaminant plume. DRO continues to be detected above the endpoint criteria (since 2006). As indicated by statistical analysis of data collected between 2005 and 2013, the DRO concentration is stable with no statistically significant trend.

- Well 04-173: This well is located within the contaminant plume. Free product was not detected in this well in 2013 but DRO exceeded endpoint criteria. As indicated by statistical analysis of the four events collected between 2004 and 2013, the concentration is stable with no statistically significant trend.
- Well SP4-3: This well is located within the contaminant plume. DRO was detected at concentrations above endpoint criteria in 2013. As indicated by statistical analysis of data collected between 2003 and 2013, the DRO concentration is stable with no statistically significant trend.

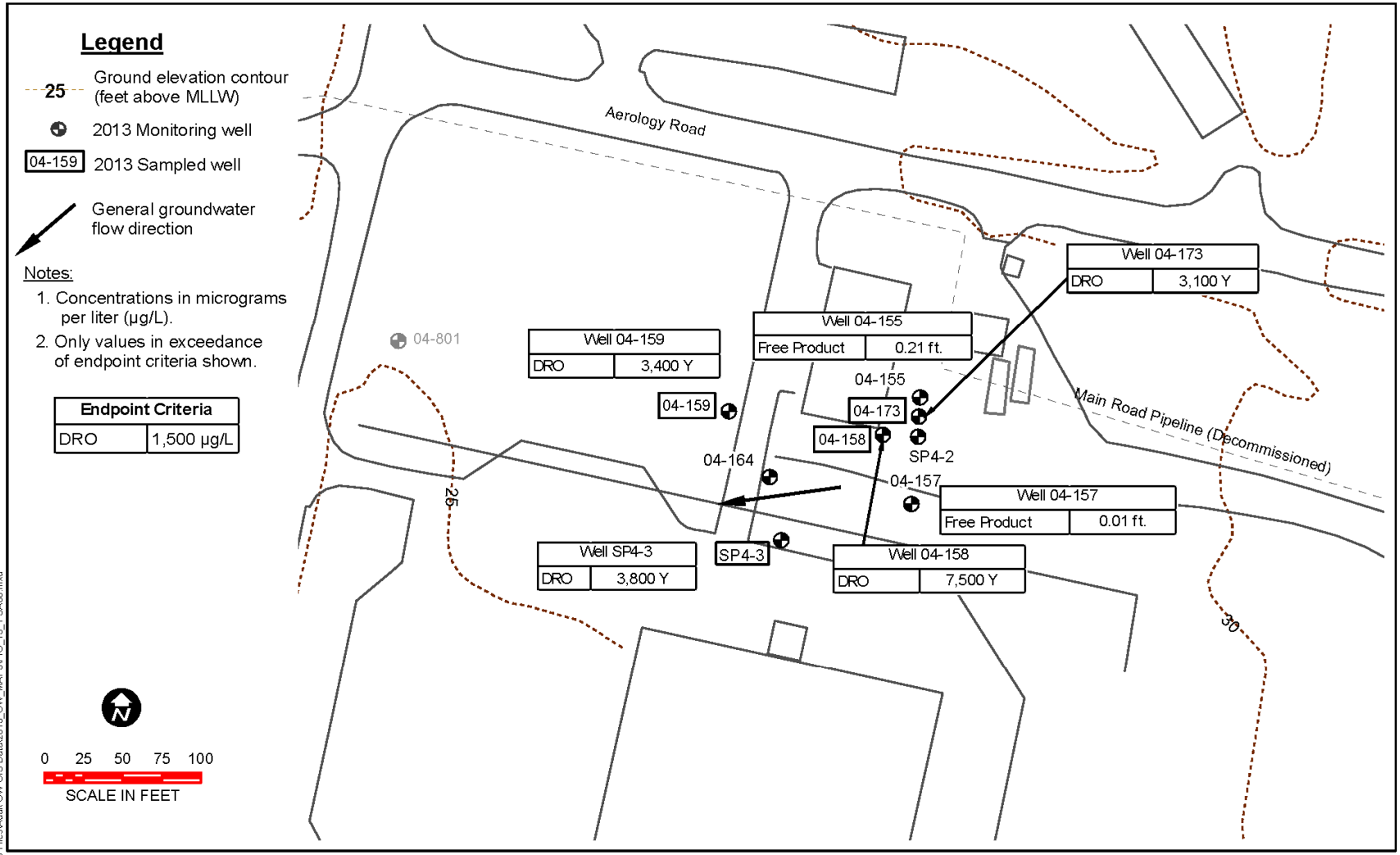
15.6 RECOMMENDATIONS

DRO continues to exceed endpoint criteria and is exhibiting stable concentrations in site wells. Measurable product continues to be observed in some site wells and periodic product recovery activities continue at the site. However, it should be noted that the observation of free product in wells slated for sampling has decreased over the last two years. Additionally, there is strong evidence that MNA is occurring in groundwater at the site. It is therefore recommended that monitoring at this site continued as prescribed to allow for the remedy to decrease contaminant concentrations in groundwater.

Table 15-3. Concentration Trend Evaluation for SA 80, Steam Plant 4

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	Target Analyte	Exceeds Endpoint Criteria	Highest Concentration Last Two Sampling Periods (µg/L)	Endpoint Criteria[1] (µg/L)	Sampling Periods (n)	Mann-Kendall Statistic (S)	Trend at 80% C.I.	Trend at 95% C.I.	Concentration Stability[2]	Median Slope	Statistically Significant Trend	Lower Limit	Upper Limit
04-158	DRO	Yes	8,700 Y	1,500	4	0	No trend	No trend	Stable	NC	NC	NC	NC
04-159	DRO	Yes	3,400 Y	1,500	9	0	No trend	No trend	Stable	NC	NC	NC	NC
04-173	DRO	Yes	3,900 Y	1,500	4	2	No trend	No trend	Stable	NC	NC	NC	NC
SP4-3	DRO	Yes	3,800 Y	1,500	9	0	No trend	No trend	Stable	NC	NC	NC	NC

Notes:
[1] Endpoint criteria are established from ADEC cleanup levels for groundwater used as a drinking water source.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.



U.S. NAVY	SEALASKA	Figure 15-1 SA 80, Steam Plant 4, USTs 27089 and 27090 Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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16 SOUTH OF RUNWAY 18-36 AREA

This section presents the results of groundwater monitoring performed at the South of Runway 18-36 Area site during 2013. The remedy specified for this site in the OU A ROD is Free Product Recovery (Navy, ADEC and EPA 2000). ICs, product recovery and MNA were established as remedies in the Final Decision Document for South of Runway 18-36 Area, August 2006 (Navy 2006b). In addition, natural recovery was selected for surface water and sediment in South Sweeper Creek at this site. The LTM program for this site was initially proposed in a technical memorandum in 2006 (Navy 2006c). Annual monitoring under the LTM program for 2013 includes groundwater sampling, water level/product thickness monitoring, sediment sampling and surface water sampling. The Final Decision Document for the South of Runway 18-36 (Navy 2006b) specifies that groundwater at this site is not reasonably expected to be a potential future source of drinking water. Groundwater samples are collected from these wells to evaluate groundwater quality relative to 10 times the ADEC Table C values (18 AAC 75.345) and to monitor for surface water protection and natural recovery.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, an interpretation of the groundwater flow direction based on water levels, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

16.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at 12 monitoring wells on August 30, 2013. Table 16-1 provides the measured depths-to-water, the calculated groundwater elevations and if present the product thicknesses. Groundwater elevations have been corrected for the presence of free product in those wells with detectable thickness (Appendix D-1).

Figure 16-1 shows the location of the monitoring wells, the site topography, the interpreted groundwater flow direction and the downgradient surface water bodies (South Sweeper Creek and Sweeper Cove).

Table 16-1. 2013 Field Measurements for South of Runway 18-36 Area

	Physical Measurements				Water Quality Parameters						
Well Location	Casing Elevation (ft MLLW)	Depth-to-Water (ft BTOC)	Groundwater Surface Elevation (ft MLLW)	Measured Product Thickness (ft)	pH (SU)	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Salinity (%)	ORP (mV)
Groundwater Samples											
02-231	16.59	14.32	2.00	0	5.75	0.371	0.0	0.00	8.39	0.02	-115
02-232	18.54	16.55	1.14	0	6.12	0.422	0.0	0.00	8.98	0.02	-116
18/36-02	19.86	17.50	2.07	0	NP	NP	NP	NP	NP	NP	NP
AS-1	12.10	13.66	-1.61	0	6.22	0.499	0.0	0.00	8.81	0.02	-123
E-213	13.73	10.90[1]	2.45	0.01	NP	NP	NP	NP	NP	NP	NP
E-216	18.45[2]	16.01[1]	2.44	0.14	NP	NP	NP	NP	NP	NP	NP
E-217	18.12	15.60[1]	2.50	0.04	NP	NP	NP	NP	NP	NP	NP
RW-18/36-03	16.26	13.59	2.66	0	NP	NP	NP	NP	NP	NP	NP
RW-18/36-04	16.29	13.48[1]	2.81[1]	0.14	NP	NP	NP	NP	NP	NP	NP
RW-18/36-05	11.39	8.93	2.03	0	NP	NP	NP	NP	NP	NP	NP
Z 3-6	9.81[2]	7.25	2.56	0	NP	NP	NP	NP	NP	NP	NP
Z 4-2	14.92[2]	12.17	2.75	0	NP	NP	NP	NP	NP	NP	NP
Surface Water Samples											
NSWSD-7	NA	NA	NA	NA	6.21	0.885	21	7.28	11.40	0.60	138
NSWSD-8	NA	NA	NA	NA	7.14	3.28	11	7.89	11.82	0.10	141

Notes:
[1] Corrected for presence of free product in the well.
[2] New casing elevation because well was repaired in 2013
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

Historic groundwater elevation data indicate that the groundwater flows primarily west onto the site and then spreads radially to discharge into adjacent surface water bodies: north to Crossover Canal and West Canal, west to South Sweeper Creek, and southwest to Sweeper Cove. Groundwater elevations collected in 2013 were compared with historical data and are consistent with this interpretation.

Three monitoring wells, two surface water locations and three sediment sampling locations were sampled between August 30 and September 3, 2013. Surface water protection monitoring was performed at three well locations (02-231, 02-232 and AS-1). Field measurements were recorded in the field forms and logbooks during sampling activities (Appendix A). Table 16-1 lists the final field measurements recorded at each monitoring well and surface water location prior to sample collection. A review of the sampling data reported for this site indicates that prior to sample collection all wells exhibited groundwater parameters that stabilized to within specified criteria.

Measurable free product was detected in four wells during the 2013 LTM field event: E-213 (0.01 feet), E-216 (0.14 feet); E-217 (0.04 feet) and RW 18/36-04 (0.14 feet). Because all product thicknesses were less than 0.5 feet, removal of free product from these wells was not required during the LTM event.

Visual inspections of the eastern South Sweeper Creek shoreline were conducted between surface water/sediment locations NSWSD-08 and NSWSD-07 to identify evidence of visible petroleum contamination. Heavy precipitation occurred during the shoreline inspection resulting in heavy surface water runoff. Four small areas of oil sheen on sediment were observed during the inspection that was likely made more visible due to the heavy rain. The four areas are:

- a 1-foot square area observed at the south end of the product interception culvert
- a 5 feet by 8 feet area observed near sediment sample location SWSD-05
- a 3 feet by 6 feet area observed just south (downstream) of the Moffett Road Bridge
- an 8-foot square area observed just upstream from the Moffett Road Bridge

Moderate petroleum odor and black-stained sediment just beneath the soil surface which released sheen when disturbed were observed at these locations. Oily sediments, petroleum sheen and odor were observed along the shoreline adjacent to South of Runway 18-36 during sediment sampling at locations NSWSD-2 and NSWSD-05 at approximately a quarter to a half inch below the sediment surface. For the second consecutive time since sampling commenced at this location, no visible petroleum contamination was observed at

NSWSD-4. However, DRO concentrations in all three of these sediment samples still exceeded endpoint criteria in 2013. No visible contamination was observed at either surface water sample NSWSD-07, collected at the mouth of South Sweeper Creek, or NSWSD-08, collected north and upstream of the site. Results of the visual shoreline inspections are summarized in Section 4.1.3.

16.2 TARGET ANALYTE RESULTS

The following sections describe the analytical results for each medium sampled in 2013. Figure 16-1 illustrates the location of the wells sampled, the surface water/sediment locations and the analytical results above the endpoint criteria. The analytical results obtained for these locations from 2000 through 2013 are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

16.2.1 Groundwater

Groundwater samples were collected from wells 02-231, 02-232 and AS-1. The samples from all wells were analyzed for BTEX and PAHs. In addition, the sample from well 02-231 was also analyzed for DRO. TAH and TAqH were then calculated from the BTEX and PAH results. Figure 16-1 shows the locations of the wells and the analytical results of those data exceeding the endpoint criteria. Table 16-2 presents the analytical results.

DRO and BTEX compounds were not detected above the endpoint criteria in any groundwater sample collected in 2013. TAH exceeded the ADEC water quality standard (10 µg/L) in the 2013 samples collected from wells 02-231 and AS-1 at concentrations of 260 µg/L and 22 µg/L, respectively. In addition, TAqH exceeded the ADEC water quality standard (15 µg/L) in wells 02-231 and AS-1 at concentrations of 396 µg/L and 43 µg/L, respectively. The TAH and TAqH standards were not exceeded in the samples from well 02-232.

16.2.2 Surface Water

The surface water samples, NSWSD-7 and NSWSD-8, were analyzed for DRO, BTEX and PAHs. TAH and TAqH were calculated from the BTEX and PAH results. Figure 16-1 shows the locations where surface water samples were collected and the analytical results. Table 16-3 presents the analytical results.

None of the surface water samples showed concentrations of analytes above their respective ADEC water quality standards or risk-based cleanup levels (DRO, 250 µg/L; indeno(1,2,3-cd)pyrene, 0.28 µg/L; TAH, 10 µg/L; and TAqH, 15 µg/L).

Table 16-2. Analytical Results for Petroleum-Related Chemicals in Groundwater at South of Runway 18-36 Area

Well Location	Year	DRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)
02-231 Plume Source Area; Surface Water Protection Well	2000	1,200	39	4.3	52	220	NP	NP
	2001	**23,800**	33.4	4.37	47.3	157	NP	NP
	2002	14,000	33	3.2	34	150	NP	NP
	2003	8,600	**110**	4.2	64	176	NP	NP
	2004	9,970	**67.4**	1.99	49.2	103	NP	NP
	2005	**17,800**	42 J	2.65 J	55.1 J	221	NP	NP
	2006	**20,000 J**	36	2.9	52	230	NP	NP
	2007	**18,000 J**	17	2.1	52	219 D	**290 JD**	**291 JD**
	2008	**18,000 JY**	24	2.4	52	208 D	**287 D**	**292 D**
	2009	6,700 Y	35	2.6	68	290 D	**395 D**	**532 D**
	2010	7,100 YJ	31	2.9	65	268 D	**367 D**	**532 JD**
	2011	5,100 Y	25	2.4	61	258 D	**346 D**	**470 D**
	2012	5,400 YJ	25 J	3.9 J	70 D	269 JD	**368 JD**	**491 JDX**
	2013	6,000 Y	21	2.3	60	177 D	**260 D**	**396 JDX**
02-232 Downgradient Plume Edge; Surface Water Protection Well	2000	160 UJ	0.2 U	0.3 U	0.46 J	0.4	NP	NP
	2001	1,780	0.2 U	0.5 U	0.5 U	0.2 UJ	NP	NP
	2002	2,800	NP	NP	NP	NP	NP	NP
	2003	1,100	NP	NP	NP	NP	NP	NP
	2004	1,870	NP	NP	NP	NP	NP	NP
	2005	2,320	NP	NP	NP	NP	NP	NP
	2006	2,000	1.0 U	1.0 U	1.0 U	3.0 U	NP	NP
	2007	1,300 Y	0.50 U	0.16 J	0.22 J	1.0 U	0.38 J	0.51 J
	2008	1,400 Y	0.50 U	0.50 U	0.21 J	0.12 J	0.33 J	1.8 J
	2009	1,500 Y	NP	NP	NP	NP	NP	NP
	2010	2,400 YJ	0.16 J	0.50 U	0.29 J	1.0 U	0.45 J	2.3 J
	2011	3,300 Y	NP	NP	NP	NP	NP	NP
	2012	NP	0.19 J	0.50 U	3.3	0.45 J	3.9 J	9.0 J
	2013	NP	0.14 J	0.50 U	0.090 J	1.0 U	0.23 J	3.5 JX
AS-1 Surface Water Protection Well	2006	**FP**	**FP**	**FP**	**FP**	**FP**	NP	NP
	2007	2,800 Y	12	0.42 J	35	38.7	**86 J**	**280 JD**
	2008	3,500 Y	10	0.55 U	19	21.4 J	**50 J**	**176 JD**
	2009	2,700 Y	10	0.50 U	34	35.6	**80**	**286 D**
	2010	1,500 YJ	4.0	0.50 U	15	12.1 J	**31 J**	**48 JD**
	2011	950 Y	2.6	0.14 J	0.26 J	0.11 J	3.1 J	7.3 J
	2012	NP	13	1.0 U	9.1	9.0 J	**31 J**	**89 JDX**
	2013	NP	17	0.090 J	1.7	3.7	**22 J**	**43 JDX**
Endpoint Criteria[3]		15,000	50	10,000	7,000	100,000	10	15

Notes:

[1] TAH results were calculated by summing the detected concentrations of BTEX when one or more were detected and by summing the quantitation limits when none were detected.

[2] TAqH results were calculated by summing the detections of BTEX and 16 PAHs when one or more were detected and by summing the quantitation limits when none were detected.

[3] The TAH and TAqH endpoint criteria are based on ADEC water quality standards as specified in 18 AAC 70.

Bold indicates reported concentration is greater than the endpoint criteria.

Table 16-3. Analytical Results for Petroleum-Related Chemicals in Surface Water at South of Runway 18-36 Area

Location	Year	DRO (µg/L)	Indeno(1,2,3-cd)pyrene (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)
NSWSD-7 Downgradient Sweeper Cove	2006	170	0.098 U	0.96 J	1.1 J
	2007	46 J	0.020 U	0.71 J	0.73 J
	2008	14 J	0.020 U	2.95 U	0.005 J
	2009	96 Y	0.020 U	0.31 J	0.43 J
	2010	100 U	0.020 U	2.2 J	2.4 J
	2011	170 Y	0.020 U	1.8 J	2.0 J
	2012	49 U	0.021 U	0.43 J	0.51 J
	2013	110 Y	0.020 U	2.0 J	2.3 J
NSWSD-8 Upgradient	2006	49	0.10 U	6.0 U	7.6 U
	2007	49 U	0.020 U	0.11 J	0.13 J
	2008	130 Y	0.020 U	1.7 J	1.7 J
	2009	180 Y	0.020 U	4.5 J	4.7 J
	2010	50 U	0.020 U	0.12 J	0.13 J
	2011	78 U	0.020 U	2.5 U	0.03 J
	2012	50 U	0.020 U	2.5 U	0.05 J
	2013	29 J	0.020 U	2.5 U	0.02 JX
Endpoint Criteria[3]		250	0.28	10	15

Notes:
[1] TAH results were calculated by summing the detected concentrations of BTEX when one or more were detected and by summing the quantitation limits when none were detected.
[2] TAqH results were calculated by summing the detections of BTEX and 16 PAHs when one or more were detected and by summing the quantitation limits when none were detected.
[3] The TAH and TAqH endpoint criteria are based on ADEC water quality standards as specified in 18 AAC 70.
Bold indicates reported concentration is greater than the endpoint criteria.

16.2.3 Sediment

The sediment samples (NSWSD-2, NSWSD-4 and NSWSD-5) were analyzed for DRO and PAHs. Figure 16-1 shows the locations where sediment samples were collected and the analytical results of those data in exceedance of the endpoint criteria. Table 16-4 presents the analytical results.

DRO was detected in sediment samples NSWSD-2, NSWSD-4 and NSWSD-5 at concentrations ranging from 97 mg/kg to 580 mg/kg, which exceed the risk-based cleanup level of 90.6 mg/kg. PAH compounds 2-methylnaphthalene and phenanthrene were not detected in any sediment samples above their respective risk-based cleanup levels of 0.0202 mg/kg and 0.225 mg/kg, respectively.

Table 16-4. Analytical Results for Sediment at South of Runway 18-36 Area

Location	Year	DRO (mg/kg)	2-Methylnaphthalene (mg/kg)	Phenanthrene (mg/kg)
NSWSD-2 Downgradient	2006	**270 J**	0.048 U	0.048 U
	2007	**550 Y**	0.0032	0.012
	2008	**390 YJ**	0.0094	0.015 U
	2009	**15,000 YHJ**	**0.140 JD**	**0.350 U** [1]
	2010	**1,600 Y**	0.0027 J	0.054 U
	2011	**500 Y**	0.0042	0.099
	2012	**1,400 Y**	0.00089 J	0.0071 U
	2013	**580 DY**	0.0023 J	0.024
NSWSD-4 Downgradient	2006	**330**	0.0084 U	0.091
	2007	**270 Y**	0.0025 J	0.120
	2008	**160 YJ**	0.0025 J	0.032 J
	2009	**120 YH**	0.0021 J	0.069
	2010	**130 Y**	0.0027 J	0.089
	2011	**110 Y**	0.00066 J	0.0032 U
	2012	**100 Y**	0.0033 U	0.0050
	2013	**97 DY**	0.00062 J	0.0031 JX
NSWSD-5 Downgradient	2006	**250**	0.0083 U	0.020
	2007	**100 Y**	0.0023 J	0.0099
	2008	36 J	0.00052 J	0.0049 U
	2009	**280 YHJ**	0.0025 J	0.0072 U
	2010	**340 Y**	0.0035	0.011 U
	2011	**110 Y**	0.0010 J	0.0046 U
	2012	**430 Y**	0.00068 J	0.0035 U
	2013	**170 DY**	0.0020 J	0.021
Endpoint Criteria		90.6	0.0202	0.225

Notes:
[1] Value is an elevated detection limit that is greater than the risk-based cleanup level due to matrix interference as reported by the laboratory.
Bold indicates reported concentration is greater than endpoint criteria.

16.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that biodegradation of petroleum hydrocarbons is likely occurring by iron (II) reduction; sulfate reduction; and methanogenesis as shown by elevated ferric iron concentrations, depleted sulfates and elevated methane concentrations in comparison to background conditions. Groundwater parameters presented in Table 16-1 collected during the 2013 LTM event support evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and depleted dissolved oxygen (0.0 mg/L) in the vicinity of the product recovery trench. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

16.4 TREND EVALUATION

Statistical evaluations are only conducted on target analyte concentrations in groundwater for analytes that exceed endpoint criteria within that last three sampling events, in accordance with the CMP, Revision 5 (Navy 2012a). Because groundwater contaminant concentrations in all wells has been below endpoint criteria for at least the last three consecutive years, trend evaluations were not performed at this site in 2013.

16.5 CONCLUSIONS

This section presents the conclusions based on a review of LTM activities performed at the South of Runway 18-36 Area site in 2013. The conclusions are as follows:

- Groundwater Flow: Based on historic and 2013 field measurements, the interpreted groundwater flow direction has a radial pattern that is generally to the north toward Crossover Canal and West Canal, to the west toward South Sweeper Creek and to the southwest at the south end of the site toward Sweeper Cove.
- MNA: The groundwater parameters obtained during the 2013 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Free product was observed in wells E-213 (0.01 feet), E-216 (0.14 feet), E-217 (0.04 feet) and RW-18/36-04 (0.14 feet). Groundwater sampling was not planned at these locations.
- Well 02-231: This surface water protection well is located within the contaminant plume. The DRO concentration was observed below the endpoint criteria in 2013 and has remained below the criteria for five consecutive sampling events. BTEX concentrations have remained below their respective endpoint criteria for nine sampling events. TAH and TAqH concentrations continue to exceed their respective endpoint criteria in 2013.
- Well 02-232: This surface water protection well is located downgradient of the contaminant plume and upgradient of sediment location NSWSD-05. BTEX, TAH and TAqH concentrations have remained below their respective endpoint criteria for at least five sampling events.
- Well AS-1: This surface water protection well is located downgradient of the contaminant plume and upgradient of sediment location NSWSD-02. BTEX concentrations have remained below their respective endpoints for seven sampling events. For the 2013 samples, TAH and TAqH concentrations exceeded the ADEC water quality standards.

- Neither of the surface water samples, NSWSD-07 and NSWSD-08, exceeded endpoint criteria in 2013. All surface water samples collected have remained below endpoint criteria since sampling was initiated in 2006.
- Sediment Location NSWSD-2: The DRO concentration exceeded the endpoint criteria at 580 mg/kg. Oily sediments, sheen and petroleum odor were observed when the sediment was disturbed during sampling. Phenanthrene and 2-methylnaphthalene were below endpoint criteria in this sample. This sample location is immediately downgradient and adjacent to the product recovery trench.
- Sediment Location NSWSD-4: The DRO concentration exceeded the endpoint criteria at 97 mg/kg. For the second consecutive time since sampling commenced at this location, no visible petroleum contamination was observed when the sediment was disturbed during sampling. DRO concentrations have decreased at this location compared to 2012 concentrations. Phenanthrene and 2-methylnaphthalene remained below endpoint criteria in sediment and have been below endpoint criteria for the past eight sampling events. This sample location is downstream of the product recovery trench approximately 180 feet.
- Sediment Location NSWSD-5: DRO exceeded the endpoint criteria at 170 mg/kg. Oily sediments, sheen and petroleum odor were observed when the sediment was disturbed during sampling. Phenanthrene and 2-methylnaphthalene remained below endpoint criteria in sediment and have been below endpoint criteria for the past eight sampling events. This sample location is downstream of the product recovery trench approximately 300 feet.
- During a shoreline inspection of South Sweeper Creek at low tide downgradient from the site, black-stained sediment was observed at several sections of shoreline in the vicinity of sample locations NSWSD-4 and NSWSD-5, and at four small areas downgradient from the site. Visible petroleum contamination was also observed during sediment sampling activities in South Sweeper Creek as described above.

16.6 RECOMMENDATIONS

DRO continues to exceed endpoint criteria in shoreline sediments, and TAH and TAqH continue to exceed endpoint criteria in surface water protection wells. However, the observance of petroleum groundwater contamination (as free product or DRO concentrations) has greatly diminished across the site over the last three years.

DRO concentrations continue to exceed endpoint criteria in shoreline sediment but at decreased concentrations compared to 2012. No visible evidence of petroleum contamination was observed at location NSWSD-4 for the second consecutive sampling event and DRO concentrations have decreased to just above endpoint criteria here. Select PAHs, 2-methylnaphthalene and phenanthrene, have not exceeded endpoint criteria in sediment samples collected from locations NSWSD-2, NSWSD-4 or NSWSD-5 since 2006. Therefore, it is recommended that monitoring for these compounds be discontinued.

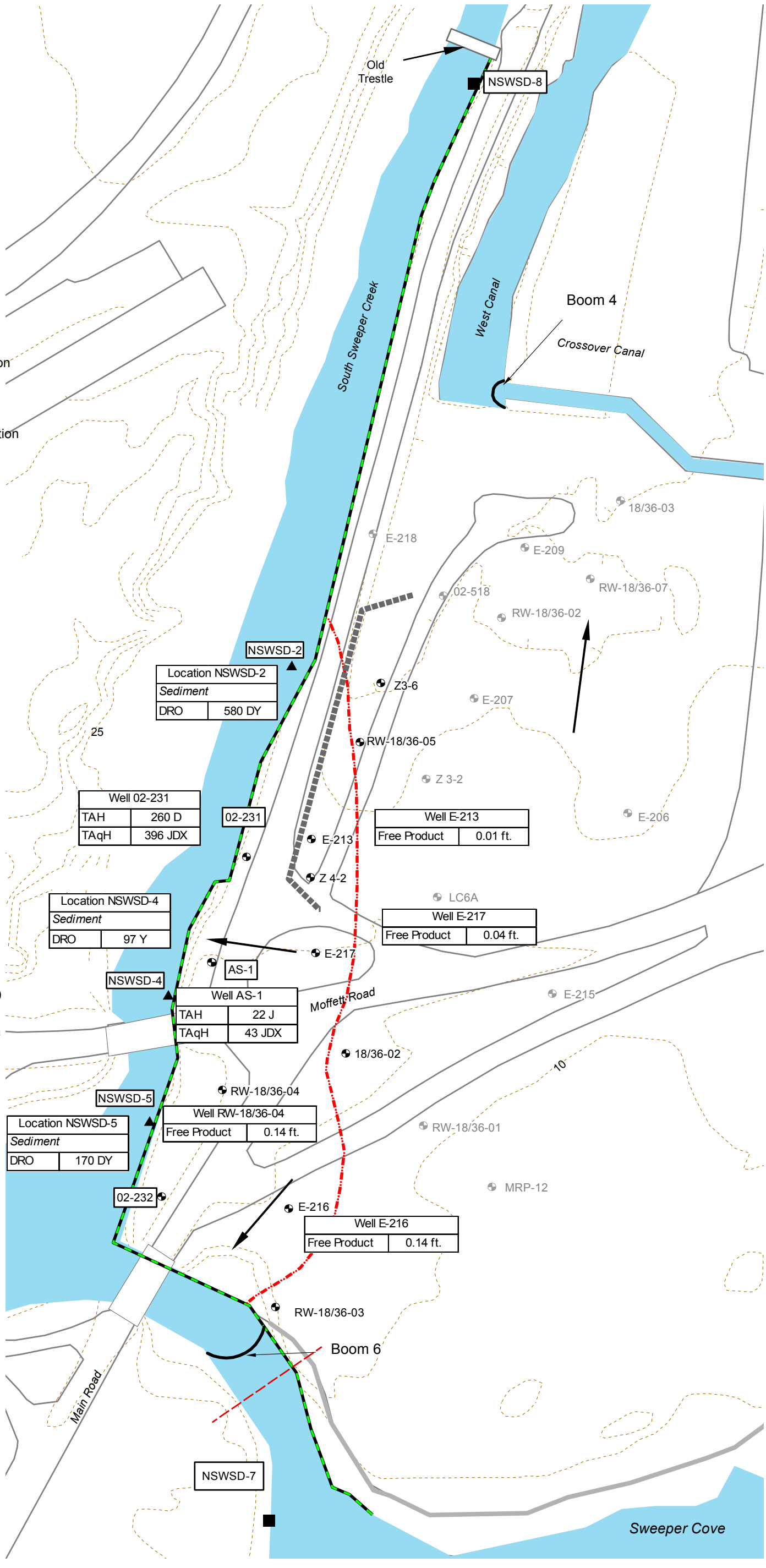
Because no contaminants have exceeded any endpoint criteria in either surface water sample NSWSD-07 or NSWSD-08 since at least 2006, it is recommended that sampling at these locations be discontinued.

Because of the continued exceedance of endpoint criteria for DRO in sediment; the continued exceedance of endpoint criteria for TAH and TAqH in surface water protection wells; and the occasional observance of free product in other site wells, it is recommended that all other monitoring at the site be continued as prescribed.

Final / June 20, 2014

Legend

- 25 — Ground elevation contour (ft above MLLW)
- Estimated extent of endpoint criteria exceedance
- Main Road Pipeline
- Shoreline inspection performed
- Product recovery trench
- 02-231 — Sample collected in 2013
- 2013 Monitoring well
- Well not monitored in 2013
- 2013 Surface water sample location
- 2013 Sediment sample location
- General Groundwater Flow Direction



Notes:

1. Concentrations in micrograms per liter (µg/L) for wate and milligrams per kilograms (mg/kg) for sediment.
2. Only values in exceedance of endpoint criteria shown.

Endpoint Criteria	
Groundwater	
TAH	10 µg/L
TAqH	15 µg/L
Sediment	
DRO	90.6 mg/kg

0 50 100 150 200
SCALE IN FEET

16-11

U.S. NAVY	SEALASKA	Figure 16-1 South of Runway 18-36 Area Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

Date: 1/6/2014
Path: F:\Adak CAD\Adak GIS Files\Adak GW GIS Data\2013_GW_MAPS\FIG_16_1_18-36.mxd

17 SWMU 11, PALISADES LANDFILL

17.1 BACKGROUND

Palisades Landfill (SWMU 11) is located approximately 1 mile north of the main downtown area of Adak. It was used as the primary disposal area for all operations on Adak Island from the 1940s to approximately 1970. The landfill area, which is approximately 6 acres, covers portions of the coastal uplands immediately adjacent to Kuluk Bay and part of a steep ravine. The ravine is approximately 1,200 feet long, 5 to 300 feet wide and 5 to 150 feet deep, with a small stream (Palisades Creek) running through it. The mouth of the ravine opens immediately to Kuluk Bay (Navy 2001a).

The landfill received wastes from the 1940s to 1970. Approximately 80,000 to 100,000 cubic yards of solid waste are located in the landfill. A wide variety of materials were reportedly disposed of at Palisades Landfill, including waste petroleum, oils and lubricants; chlorinated and non-chlorinated solvents; paint waste; sanitary trash; scrap vehicles; lead and mercury batteries; construction waste; and mercury. The landfill was covered with local soils in the early 1970s after disposal practices were stopped. A portion of the disposed material within the ravine has no cover and is on a steep slope. The exposed waste in the ravine consists primarily of barrels, assorted metal debris and building demolition waste. The landfill does not extend into Kuluk Bay. Groundwater occurs locally under the site and discharges into the marine environment at the downgradient boundary (Navy 2001a).

Rerouting of the creek was a source of extensive discussion between the Federal Facilities Agreement (FFA) parties during the remedial design and implementation phase. The natural access obstacles combined with ICs were deemed adequate for protection of human health. For ecological receptors known to inhabit this area, exposure to chemicals and the weathered debris in the ravine was considered minimal. The design included rerouting a portion of Palisades Creek, via a pipe through the landfill, to prevent uncontaminated stream water from contacting the landfill debris. Currently, a small pond typically exists in Palisades Creek at the intake of the pipe at the top of the ravine.

Surface soil, surface water, groundwater and stream sediment samples were collected during 1992 and 1998 site investigations. VOCs, semivolatile organic compounds (SVOCs), PCBs and inorganic analytes were detected in the sediment and surface water. Although no remedial investigation or risk assessment was performed at the time, the FFA parties

concluded that performing an interim remedial action (IRA) was the best option for this site (Navy 2001a).

In the summer of 1996, Palisades Landfill was closed according to the 1995 interim action ROD as an IRA. Closure entailed installation of a landfill cover, ICs for access and land use, surface water controls, a vegetative cover and LTM. The final OU A ROD (Navy, ADEC and EPA 2000) determined that the selected interim actions met CERCLA requirements and no further remedial actions were required. Because of the presence of hazardous materials that do not allow for unrestricted use and unlimited access, Palisades Landfill will continue to be evaluated under the CERCLA 5-year review process. The first 5-year review was completed in November 2001 (Navy 2001a). The second 5-year review was completed in December 2006 (Navy 2006d) and the third 5-year review was completed in December 2011 (Navy 2011b).

Engineering controls that are implemented at SWMU 11 include excavation and use restriction signs and a soil cover with drainage swales. The sinkhole noted in the 2009 IC Inspection Report (Navy 2010) was repaired in 2010 but was again observed during subsequent IC inspections in 2011, 2012 and 2013 (Navy 2013e)

17.2 SAMPLING HISTORY RELATED TO CLOSURE MONITORING

Sediment and surface water have been sampled at Palisades Landfill periodically since May 1996. As of 2013, 20 sampling events have occurred there (see Table 2-2). In May 1996, prior to landfill closure activities, two surface water and sediment locations were sampled and analyzed for pesticides, PCBs, SVOCs and total inorganics (metals). Surface water samples were also analyzed for dissolved inorganics (metals), BTEX and turbidity. Sediment samples were also analyzed for total organic compounds. In August and November 1996, following landfill closure, samples were collected again and analyzed for the same chemicals and parameters. In February and May 1997, sampling of sediment and surface water was performed at the same locations (Navy 2001a). In June 1998, September 1999, November 2000, September 2001, October 2002, October 2003, September 2004, September 2005, September 2006 and September 2008, sediment and surface water sampling was performed. Sediment sampling has been performed on site annually from 2007 through 2011. Sampling was reduced to biennially and performed again in 2013. The analytical results from the sampling conducted at Palisades Landfill from 1996 through 2013 are presented in Appendix C-2.

Target analytes were analyzed in sediment in 2013 as specified in the CMP, Revision 5 (Navy 2012a) and include the following:

- PCBs
- Bis(2-ethylhexyl)phthalate
- PAHs
- Antimony
- Arsenic
- Nickel

17.3 DISCUSSION OF RESULTS

During the 2013 landfill monitoring event, sediment samples were collected at the Palisades Landfill, as specified in the CMP, Revision 5 (Navy 2012a), and sent to an off-site laboratory for analysis. The locations where samples were collected during the 2013 event are shown on Figure 17-1. Field forms and logbooks are provided in Appendix A; photographs of the site and sampling locations are presented in Appendix I. A summary of the analytical results for the target analytes from the 2013 sampling event and the endpoint criteria are provided for sediment in Table 17-1. Analytical results for sediment were compared with the endpoint criteria listed in Table 3-3. Analytical results that exceeded the endpoint criteria are summarized in the text below and complied in Appendix F.

Sediment samples were collected at three locations (101, 102 and 103) and analyzed for PCB Aroclors (EPA Method 8082A Low Level), select PAHs (EPA Method 8270D selected ion monitoring [SIM]), bis(2-ethylhexyl)phthalate (EPA Method 8270D Low Level) and select total metals (antimony, arsenic and nickel by EPA Method 6020A). Sampling location 101 represents the most upgradient location along the Palisades Creek flow path northwest of the landfill before it enters the ponded area. Sampling location 102 is located where the surface water discharges at the base of the metal debris. Sampling location 103 is located at the mouth of Palisades Creek where it enters Kuluk Bay and represents a downgradient sampling point intended to evaluate the migration of contaminants beyond location 102. Sediment samples from locations 101 and 102 are considered freshwater sediment samples; and the sediment sample from location 103 is considered a marine sediment sample.

Visual inspections of the sediment sampling locations at Palisades Landfill were also completed during the LTM field event and field inspection forms are presented in

Appendix A. No visual evidence of contamination was observed at any sampling locations. Visual inspections are discussed in more detail in Section 4.1.3. IC inspections were conducted during the 2013 monitoring event and are reported in the 2013 IC Site Inspection Report (Navy 2013e).

Table 17-1. Summary of Sediment Analytical Results at SWMU 11, Palisades Landfill

					Endpoint Criteria		
Target Analyte	**Location 101[1] 9/04/13**	**Location 102[1] 9/04/13**	**Location 102D[1,3] 9/04/13**	**Location 103[2] 9/04/13**	**Long et. al. 1995[2] Freshwater and Marine[2]**	**Ecological RBSC[4]**	**Human Health RBSC[4]**
SVOCs – Bis(2-ethylhexyl)phthalate and PAHs (µg/kg)							
Benzo(a)anthracene	2.0 J	120	400	3.2 U	Sum of PAHs		
Benzo(a)pyrene	5.0 U	180	220	3.2 U			
Benzo(b)fluoranthene	3.9 J	230	400	3.2 U			
Benzo(g,h,i)perylene	2.8 J	130	130	3.2 U			
Benzo(k)fluoranthene	1.1 J	78	140	3.2 U			
Indeno(1,2,3-c,d)pyrene	2.2 J	140	140	3.2 U			
Sum of Above PAHs	12 J	878	1,430	0	1,700		
Bis(2-ethylhexyl) phthalate	79 U	170 JD	1,200 U	64 U			4,560
PCBs (Aroclors) (µg/kg)							
Aroclor 1016	10 U	13 U	12 U	9.9 U	Sum of Aroclors		
Aroclor 1221	20 U	26 U	23 U	20 U			
Aroclor 1232	10 U	13 U	12 U	9.9 U			
Aroclor 1242	10 U	13 U	12 U	9.9 U			
Aroclor 1248	10 U	13 U	12 U	9.9 U			
Aroclor 1254	10 U	**38**	**56**	9.9 U			
Aroclor 1260	7.2 J	**44**	**61**	9.9 U			
Sum of Above Aroclors	7.2 J	**82**	**117**	0	22.7[4]		
Total Metals (mg/kg)							
Antimony	0.116 J	**3.33 J**	**3.03 J**	0.039 UJ		2	
Arsenic	2.90	**15.6**	**10.4**	2.94	8.2		
Nickel	4.52	**55.8**	**29.4**	4.22	20.9		

Notes:
Bold indicates exceedances of endpoint criteria.
[1] Freshwater sediment sample
[2] Marine Sediment Sample (Long et al. 1995)
[3] Field duplicate sample at location 102
[4] Final PSE-2 guidance document for Adak (Navy 1996)

17.3.1 Semivolatile Organic Compounds

Bis(2-ethylhexyl)phthalate was detected in one sediment sample (102) at an estimated concentration of 170 µg/kg which did not exceed the endpoint criteria of 4,560 µg/kg.

Target PAHs were detected in two sediment sample locations (101 and 102). The sums of the target PAHs for each sample location were all below the endpoint criteria of 1,700 µg/kg (12 µg/kg at location 101 and 1,430 µg/kg at duplicate location 102).

17.3.2 Polychlorinated Biphenyls

Sediment sample location 102 had a detected concentration of Aroclor 1254 at 38 µg/kg and Aroclor 1260 at 44 µg/kg, exceeding the endpoint criteria sum of 22.7 µg/kg. Sediment sample 101 had an estimated detection of Aroclor 1260 at a concentration of 7.2 µg/kg, below the endpoint criteria sum of 22.7 µg/kg. No PCBs were detected in sediment sample 103. All other target analyte Aroclors at the Palisades Landfill were not detected in any sample.

17.3.3 Total Metals

Sediment sample 102 was the only sample for which concentrations of target metals were observed to be above endpoint criteria. For this sample, antimony was 3.33 mg/kg which is slightly above the endpoint criteria of 2 mg/kg, arsenic was 15.6 mg/kg, above the endpoint criteria of 8.2 mg/kg and nickel was 55.8 mg/kg, above the endpoint criteria of 20.9 mg/kg. No other samples had target metals exceed endpoint criteria.

17.4 CONCLUSIONS

The analytical data were reviewed for the compounds included on the target analyte list that exceeded their endpoint criteria during the 2013 sampling event. The purpose of the analysis of the recent historical data is to determine whether overt trends exist in the concentration data for the Palisades Landfill.

17.4.1 Semivolatile Organic Compounds in Sediment

All SVOCs on the pre-2010 target analyte list, including bis(2-ethylhexyl)phthalate, have been detected at least once during sediment sampling events at all three locations since sampling began in 1996 through 2013 except in 2010 when bis(2-ethylhexyl)phthalate was not detected at any of the locations. Due to variations in quantitation limits, which can be expected for sediment samples, it is not possible to interpret trends. It is clear that concentrations of SVOCs in samples from location 102 have been higher than from samples collected from locations 101 and 103, which can also be expected based on their locations.

However, the sum of target SVOCs from all sampling locations has not exceeded endpoint criteria for at least six sampling events.

17.4.2 Polychlorinated Biphenyls in Sediment

The summation of PCB concentrations have only been detected twice above the revised endpoint criterion of 22.7 µg/kg during any sampling event at locations 101 and 103, except twice. In 2000, Aroclor 1260 was detected at location 103 at a concentration of 32 µg/kg.

The summation of PCB concentrations has exceeded the revised endpoint criteria of 22.7 µg/kg at location 102 nine times since 1996, most recently in 2013. Aroclor 1260 has been the most frequently detected Aroclor with highest concentrations observed in 2006 (300 µg/kg) and in 2010 (150 µg/kg). Additionally, in 2001, sample 102 was found to contain Aroclor 1254 at a concentration of 78.7 µg/kg. In 2013, Aroclors 1260 and 1254 were detected above endpoint criteria at 61 µg/kg and 56 µg/kg, respectively. The remaining five Aroclors have not been detected in any sample since monitoring began in 1996.

17.4.3 Total Metals in Sediment

Arsenic has been detected above the endpoint criteria in sediment samples at Palisades Landfill every year since sampling began in 1996, except for 2010. Concentrations of arsenic in samples collected from locations 101 and 103 have remained steady at low levels, while concentrations of arsenic in samples collected from location 102 have fluctuated with no clear trend. Arsenic concentrations from 2013 remained below endpoint criteria in samples 101 and 103 and continue to be highest in sediment sample 102 (at 15.6 mg/kg). The endpoint for arsenic in both freshwater and marine sediments is 8.2 mg/kg, which is based on the studies of Long et al. (1995).

Nickel has not been detected above endpoint criteria in any sample collected from location 101 since sampling began in 1996. However, since 1996 nickel has routinely been detected above the endpoint criteria to a maximum concentration of 125 mg/kg in the samples collected from location 102. In 2009, sample location 102 contained a nickel concentration of 27.5 mg/kg, which is above the endpoint criteria of 20.9 mg/kg; in 2010, the concentration was 19.8 mg/kg, which is slightly below the endpoint criteria of 20.9 mg/kg; in 2011, the concentration was again above the endpoint criteria, at 31.5 mg/kg; and in 2013, the concentration was 55.8 mg/kg.

Since 1996 the concentration of nickel in samples collected from location 103 has fluctuated from non-detectable to four times detection limits. The endpoint for nickel in both freshwater and marine sediments is 20.9 mg/kg, which is based on the studies of Long et al. (1995). In 2013, the concentration was 4.22 mg/kg, which is below the endpoint criteria.

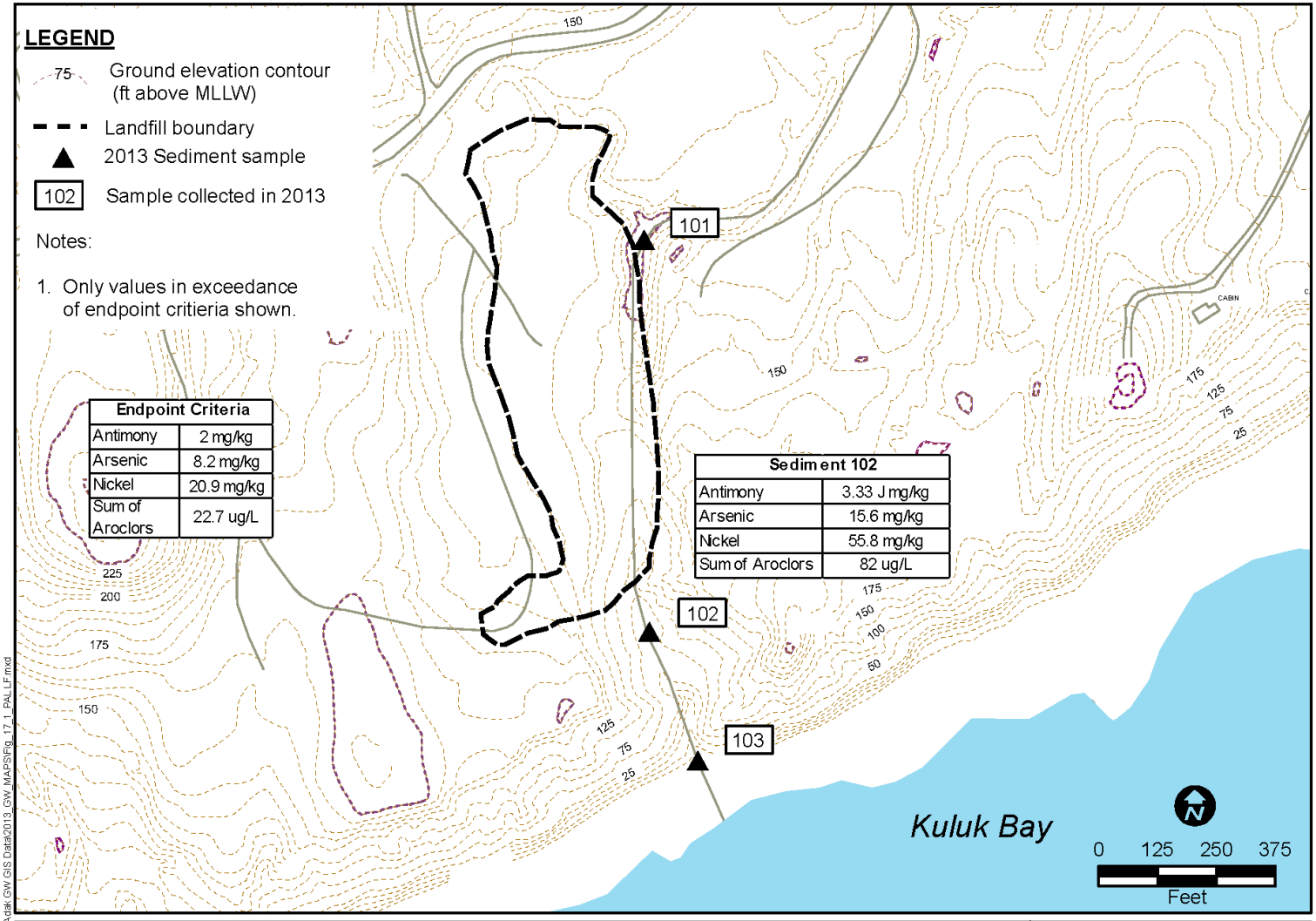
Antimony was not detected above the endpoint criteria of 2 mg/kg in any samples from 2001 through 2006. In 2007, sediment collected from location 102 was observed to contain antimony above endpoint criteria. In 2008, the antimony concentration was below endpoint criteria in all samples. Antimony has been observed to exceed the endpoint criteria at sample location 102 each year since 2009 and again in 2011 and 2013 at an estimated concentration of 3.33 mg/kg which is above the endpoint criteria of 2 mg/kg. The antimony concentrations at locations 101 and 103 remained below the endpoint criteria in 2013.

17.5 RECOMMENDATIONS

Antimony, arsenic and nickel were detected in sediment above endpoint criteria in 2013 at sample location 102. Arsenic and nickel also exceeded endpoint criteria in 2011 at sample location 102. Since the antimony, arsenic and nickel are consistently slightly above the endpoint criteria, it is recommended that sediment monitoring of these contaminants of concern be continued biennially (Table 2-6).

Since SVOCs have not exceeded any endpoint criteria in any sediment sample for the last six sampling events, it is recommended that monitoring for SVOCs be discontinued at this site.

It is further recommended that all other sediment SVOC and PCB sampling be continued biennially.



U.S. NAVY	SEALASKA	Figure 17-1 SWMU 11, Palisades Landfill Sampling Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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18 SWMU 14, OLD PESTICIDE STORAGE AND DISPOSAL AREA

This section presents the results of groundwater monitoring performed at SWMU 14, Old Pesticide Storage and Disposal Area site during 2013. The combination of MNA and compliance monitoring is the selected remedy for this site (Navy, ADEC and EPA 2000). To comply with requirements specified for this remedy, the Navy conducts periodic groundwater sampling and water level/product thickness monitoring at the site. Groundwater samples are collected to evaluate groundwater quality relative to endpoint criteria and to verify that natural attenuation is occurring.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

18.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at four monitoring wells on September 10, 2013. Table 18-1 provides the measured depth-to-water and the calculated groundwater elevation. Figure 18-1 shows the location of the wells, the site topography and features and the interpreted groundwater flow direction. The historic water level data indicate that the direction of groundwater flow beneath the site is to the south-southeast, toward Sweeper Cove. Groundwater elevations collected in 2013 were compared with historical data and is consistent with this interpretation. Free product was not observed in any well.

Groundwater sampling was also performed on September 10, 2013 at wells MW-14-5 and 01-153. Field measurements were recorded in the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 18-1 lists the final field measurements recorded at the monitoring well prior to sample collection. A review of the field measurement data reported for well MW-14-5 indicates that groundwater parameters stabilized prior to sample collection. Parameters did not stabilize in well 01-153; therefore, three casing volumes were removed prior to sampling per the CMP, Revision 5 (Navy 2012a). The 2013 analytical results in this well are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

Table 18-1. 2013 Field Measurements for SWMU 14, Old Pesticide Storage and Disposal Area

	Physical Measurements				Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
MW-14-5	21.94	16.02	5.92	0	6.00	0.166	0	0.00	7.71	0.00	2
01-153	24.29	18.54	5.75	0	6.19	0.185	11	4.59	6.81	0.00	221
MW-15-3	18.90	13.54	3.75	0	NP	NP	NP	NP	NP	NP	NP
MW-15-424	21.94	18.19	5.36	0	NP	NP	NP	NP	NP	NP	NP

Notes:
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

18.2 TARGET ANALYTE RESULTS

For the 2013 LTM event, the groundwater sample collected from well MW-14-5 was analyzed for DRO, GRO, total lead and dissolved lead. The groundwater sample collected from well 01-153 was analyzed for chlorinated VOCs and daughter products. Figure 18-1 shows the location of the well and the analytical results that are in exceedance of endpoint criteria. Tables 18-2 and 18-3 present the analytical results. The historical analytical results obtained for these locations are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

DRO and GRO were detected above their endpoint criteria (1,500 µg/L and 2,200 µg/L, respectively) in well MW-14-5 at concentrations of 2,900 µg/L and 4,700 µg/L, respectively. Additionally, total lead and dissolved lead were detected above endpoint criteria (15 µg/L) in this well at 28.5 µg/L and 27.9 µg/L, respectively. No chlorinated VOC or daughter products were detected above their respective endpoint criteria in well 01-153.

Table 18-2. Analytical Results for Petroleum-Related Chemicals and Metals for SWMU 14, Old Pesticide Storage and Disposal Area

Well Location	Year	DRO (µg/L)	GRO (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
MW-14-5 Plume Source Area	2003	**3,800**	**13,000**	**83.6**	**84.6**
	2004	**1,720**	**16,100 J**	**21.5**	**25.3**
	2005	**2,770**	**12,600 J**	**22.3**	**20.8**
	2006	**2,100**	**9,900**	14.7	15.0
	2007	**4,100 Z**	**14,000 DY**	**41.5 J**	**36.8 J**
	2008	**2,500 Z**	**11,000 DY**	**24.3**	**23.8**
	2009	**3,200 Y**	**15,000 DY**	**16.7**	**17.5**
	2010	**1,900 Z**	**9,000 DY**	14.4	13.8
	2011	**5,100 L**	**11,000 DY**	NP	NP
	2012	**3,100 LJ**	**7,000 Y**	**17.2**	**17.0**
	2013	**2,900 Y**	**4,700 Y**	**28.5**	**27.9**
Endpoint Criteria		1,500	2,200	15	15

Note:
Bold indicates reported concentration is greater than the endpoint criteria.

Table 18-3. Analytical Results for Volatile Organic Compounds for SWMU 14, Old Pesticide Storage and Disposal Area

Well Location	Year	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
01-153 Source Plume	2003	**27**	**10 U**	**10 U**	10 U	10 U	**10 U**
	2004	**7.74**	1 U	1 U	1 U	1 U	1 U
	2005	**6.75**	1 U	1 U	1 U	1 U	1 U
	2006	**11**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	2007	**8.2**	0.27 J	0.50 U	0.50 U	0.50 U	0.50 U
	2008	**7.2**	0.18 J	0.50 U	0.50 U	0.50 U	0.50 U
	2009	3.6	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
	2010	**6.0**	0.19 J	0.50 U	0.50 U	0.50 U	0.50 U
	2011	NP	NP	NP	NP	NP	NP
	2012	3.9	0.21 J	0.50 U	0.50 U	0.50 U	0.50 U
	2013	2.3	0.22 J	0.50 U	0.50 U	0.50 U	0.50 U
Endpoint Criteria		5	5	7	70	100	2

Note:
Bold indicates reported concentration is greater than the endpoint criteria for groundwater.

18.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data showed only weak evidence that petroleum biodegradation may be occurring at the site, possibly by aerobic digestion and iron reduction as shown by slightly elevated ferric iron concentrations and depleted dissolved oxygen levels. Groundwater parameters collected during the 2013 LTM event, which are presented in Table 18-1, suggest that continued natural attenuation and may be occurring as shown by the reducing environment (low ORP [2 mg/L]) and depleted dissolved oxygen (0.0 mg/L) within the petroleum plume well at the site. Dechlorination is occurring as evidence by the continued decrease in chlorinated VOC concentrations in groundwater. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

18.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a). Trend evaluation was conducted only for analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. The results of the Mann-Kendall trend evaluations are presented in Table 18-4. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well MW-14-5:
  - DRO exhibits an increasing concentration at the 80 percent confidence interval but no trend at the 95 percent confidence interval.
  - GRO is decreasing at the 80 and 95 percent confidence intervals and the Sen's evaluation indicates a statistically significant decreasing trend with a median slope of -700.
  - Total lead is stable with no trend at the 80 or 95 percent confidence intervals.
  - Dissolved lead exhibits a decreasing trend at the 80 percent confidence interval, and the Sen's evaluation has a statistically significant downward trend with a median slope of -1.22.

18.5 CONCLUSIONS

This section presents conclusions based on a review of the groundwater monitoring conducted in 2013 at the SWMU 14, Old Pesticide Storage and Disposal Area site. The conclusions are as follows:

- Groundwater Flow: The groundwater flow direction is toward Sweeper Cove to the south-southeast.
- MNA: Groundwater parameters in 2013 show weak evidence that petroleum biodegradation is occurring at the site, possibly by aerobic digestion and iron reduction. However, GRO concentrations are decreasing with statistical significance.
- Free product was not observed in the site wells in 2013.
- Well MW-14-5: This well is located within the petroleum contaminant plume. DRO, GRO, total lead and dissolved lead were all detected above their endpoint criteria. The DRO concentration is increasing at the 80 percent confidence level. GRO and dissolved lead both exhibit statistically significant decreasing trends. The total lead concentration appears stable.
- Well 01-153: All chlorinated VOCs have remained below endpoint criteria since 2012.

18.6 RECOMMENDATIONS

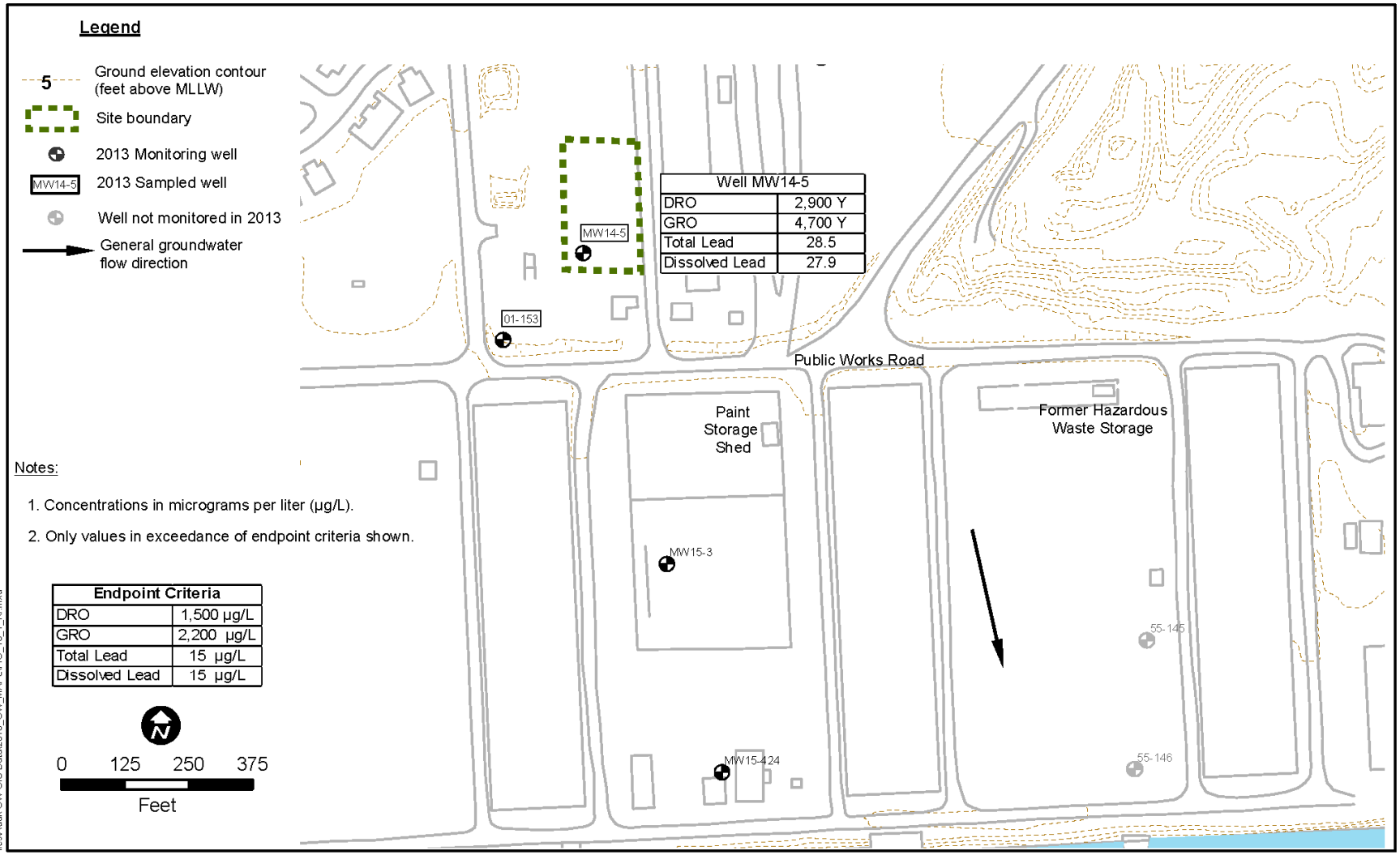
Chlorinated VOCs have remained below endpoint criteria in well 01-153 for two consecutive years which meet the requirements for discontinuing compliance at this site monitoring per the CMP, Revision 5 (Navy 2012a). It is therefore recommended that monitoring at this well be discontinued.

DRO, GRO, total lead and dissolved lead continue to exceeded endpoint criteria at MW-14-5, and exhibit variable (increasing, stable and statistically significant decreasing) trends in concentrations. Therefore, it is recommended that monitoring for these parameters be continued as prescribed.

Table 18-4. Concentration Trend Evaluation for SWMU 14, Old Pesticide Storage and Disposal Area

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Two Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
MW-14-5	DRO	Yes	3,100 Y	1,500	10	13	Increasing	No trend	NA	NC	NC	NC	NC
	GRO	Yes	7,000 Y	2,200	10	-26	Decreasing	Decreasing	NA	-700	Yes	-933	-375
	Total Lead	Yes	28.5	15	10	-9	No trend	No trend	Stable	NC	NC	NC	NC
	Dissolved Lead	Yes	27.9	15	10	-15	Decreasing	No trend	NA	-1.22	Yes	-1.92	-0.3

Notes:
[1] Endpoint criteria are established from ADEC cleanup levels for groundwater used as a drinking water source.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.



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U.S. NAVY	SEALASKA	Figure 18-1 SWMU 14, Old Pesticide Storage and Disposal Area Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

19 SWMU 17, POWER PLANT NO. 3 AREA

This section presents the results of groundwater monitoring performed at the SWMU 17, Power Plant No. 3 Area site during 2013. The remedy specified for this site in the OU A ROD is free product recovery for petroleum and compliance monitoring for non-petroleum chemicals (Navy, ADEC and EPA 2000). MNA has been selected as the post-free product recovery remedy for this site. The program is implemented in part with the CMP, Revision 5 (Navy 2012a). The site has met endpoint criteria for free product recovery and petroleum monitoring. Monitoring under the program in 2013 includes CERCLA compliance monitoring of groundwater for comparison to endpoint criteria for the remaining CERCLA contaminants of concern.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, an interpretation of groundwater flow direction based on groundwater levels, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analysis for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

19.1 FIELD MEASUREMENTS

The site is located adjacent to the western edge of the Downtown Aquifer and is underlain by a thin layer of tephra overlying bedrock. Depth-to-water and product thickness measurements were collected at one monitoring well on September 6, 2013. Table 19-1 provides the measured depth-to-water and the calculated groundwater elevation. No free product was observed in this well.

Figure 19-1 shows the location of the well, the site topography and features and the interpreted groundwater flow direction. Historic groundwater elevation data indicate that the direction of groundwater flow beneath the site conforms to the topographic slopes to the east-northeast, east and southeast toward Yakutat Creek.

Field measurements were recorded in the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 19-1 lists the final field measurements recorded at the monitoring well prior to sample collection. A review of the sampling data indicates that groundwater parameters stabilized to within specified criteria for the well prior to sample collection.

Table 19-1. 2013 Field Measurements for SWMU 17, Power Plant No. 3 Area

Physical Measurements					Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
05-735	19.00	15.84	3.16	0	6.40	0.275	0	0.00	6.94	0.01	-32

Notes:
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

19.2 TARGET ANALYTE RESULTS

The groundwater sample from monitoring well 05-735 was analyzed for select chlorinated VOCs (PCE, TCE and daughter products). Figure 19-1 shows the location of the well and the analytical results that are in exceedance of endpoint criteria. Table 19-2 presents the analytical results. Historical analytical results obtained for these locations are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

Daughter products vinyl chloride and cis-1,2-DCE were detected at concentrations above their endpoint criteria (2 µg/L and 70 µg/L, respectively) in well 05-735 (3.2 µg/L and 180 µg/L, respectively). No PCE, TCE or any other daughter product was detected above endpoint criteria in this sample.

Table 19-2. Analytical Results for Volatile Organic Compounds for SWMU 17, Power Plant No. 3 Area

Well Location	Year	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
05-735	2001	**10**	4.45	1 U	**189**	18.6	**4.18**
Plume	2002	**20 U**	**20 U**	**20 U**	**420**	19 J	**5.6 J**
Source Area	2003	3.2	3.5	1.1 J	**730**	25	**7.0**
	2004	**10.4 J**	**5.1 J**	5 U	**483 J**	28.6 J	**6.7 J**
	2005	**7.25 J**	**5.45 J**	5 U	**542 J**	25.5 J	**7.2 J**
	2006	**8.5**	4.4	1.1	**420**	22	**7.4**
	2007	4.7 D	3.0 D	0.90 JD	**570 D**	18 D	**3.4 D**
	2008	**5.7**	3.7	0.95	**340 JD**	21	**6.1**
	2009	2.5	2.8	0.74	**340 D**	18	**5.4**
	2010	1.3	2.3	0.96	**400 D**	18	**4.3**
	2011	1.6	2.6	0.68	**280 DJ**	13	**2.8**
	2012	0.90	1.6	0.75	**240 D**	13	**2.7**
	2013	0.58	1.2	0.73	**180 D**	11	**3.2**
Endpoint Criteria		5	5	7	70	100	2

Note:
Bold indicates reported concentration is greater than the endpoint criteria.

19.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that natural attenuation by dechlorination was occurring as evidenced by the decreasing concentrations of PCE, TCE and daughter products as well as the observed reducing environment. Groundwater parameters collected during the 2013 LTM event, which are presented in Table 19-1, and continued decreasing concentrations of chlorinated VOCs in groundwater, provide evidence of continued natural attenuation and dechlorination as shown

by the reducing environment (negative ORP), and depleted dissolved oxygen (0.0 mg/L). A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

19.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a). Trend evaluation was conducted only for analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. Results of the Mann-Kendall and Sen's trend evaluations are summarized in Table 19-3. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well 05-735: Cis-1,2-DCE exhibits a decreasing trend at the 80 and 95 percent confidence intervals, with a statistically significant Sen's evaluation of a decreasing trend with a median slope of –29.5. Vinyl chloride exhibits a decreasing trend at the 80 and 95 percent confidence intervals, with a statistically significant Sen's evaluation of a decreasing trend with a median slope of -0.295.

19.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring conducted at the SWMU 17, Power Plant No. 3 Area site in 2013. The conclusions are as follows:

- Groundwater Flow: Based on historic and current field measurements and site topography, the interpreted groundwater flow direction is to the northeast, east, southeast and south and generally follows surface topography.
- MNA: The groundwater parameters obtained during the 2013 LTM event provide evidence that natural attenuation by dechlorination was occurring as evidenced by the decreasing concentrations of PCE and daughter products. The groundwater parameters support evidence of continued natural attenuation as shown by the generally reducing environment (negative ORP) and depleted dissolved oxygen (0.0 mg/L).
- Well 05-735: Vinyl chloride and cis-1,2-DCE were detected in groundwater collected at concentrations above endpoint criteria. PCE, TCE, 1,1-DCE and trans-1,2,-DCE have been detected below the endpoint criteria for a minimum of five consecutive sampling events. Vinyl chloride and cis-1,2-DCE both exhibit strong, statistically significant decreasing trends.

19.6 RECOMMENDATIONS

Vinyl chloride and cis-1,2-DCE remain above endpoint criteria in compliance well 05-735 but are exhibiting statistically significant decreasing concentrations. Therefore, it is recommended that monitoring for these compounds continue as prescribed.

Concentrations of PCE, TCE, 1,1-DCE, and trans-1,2-DCE have been below endpoint criteria since at least 2007. None of these compounds are daughter products of vinyl chloride or cis-1,2-DCE which are still detected above endpoint criteria. Therefore, it is recommended that monitoring for these compounds be discontinued.

Table 19-3. Concentration Trend Evaluation for SWMU 17, Power Plant No. 3 Area

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Two Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
05-735	cis-1,2-DCE	Yes	240 D	70	10	-32	Decreasing	Decreasing	NA	-29.5	Yes	-40	-13.8
	Vinyl Chloride	Yes	3.2	2	10	-29	Decreasing	Decreasing	NA	-0.295	Yes	-0.5	-0.13

Notes:
[1] Endpoint criteria are established from ADEC cleanup levels for groundwater used as a drinking water source.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.

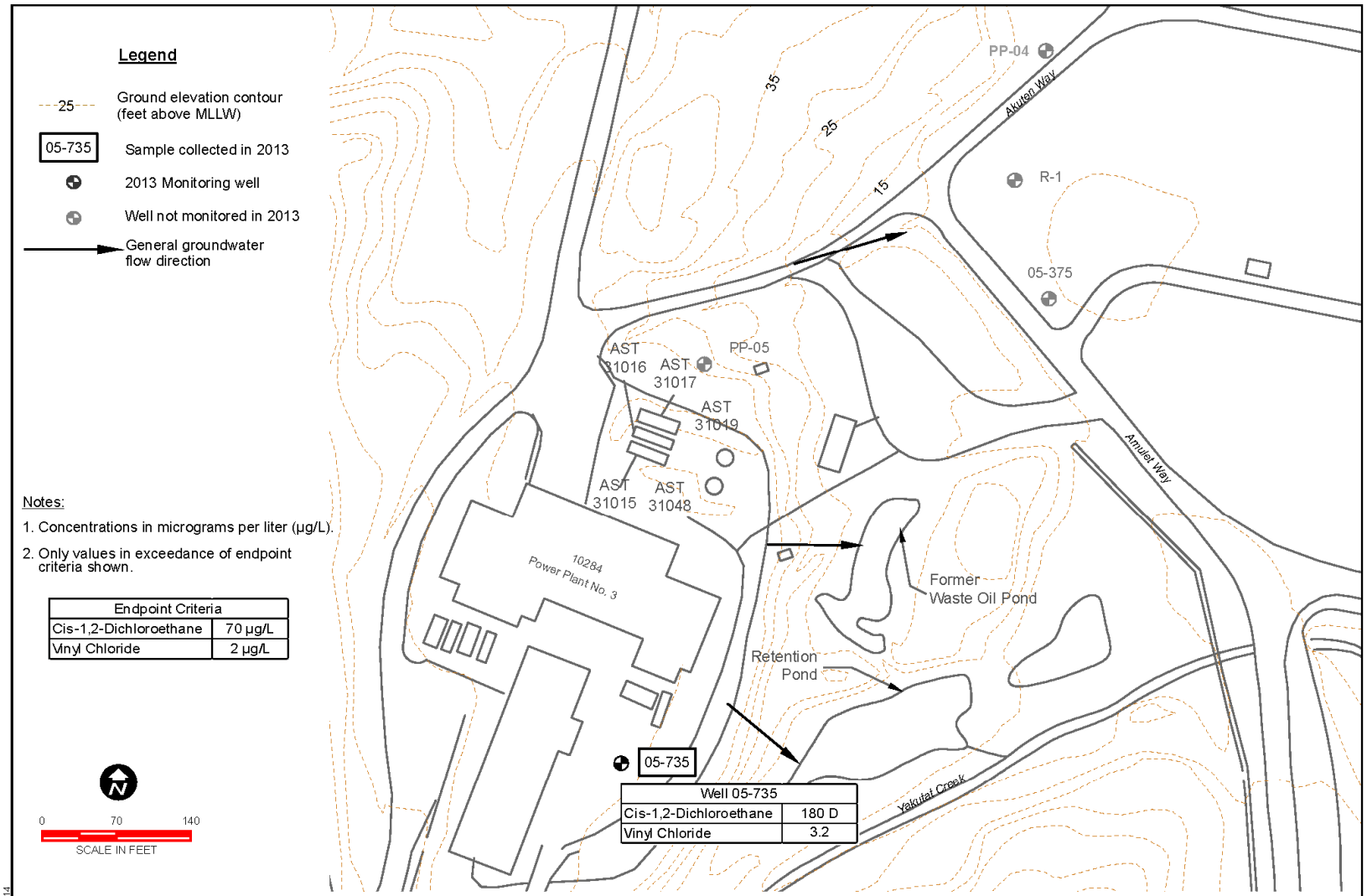

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Figure 19-1
SWMU 17, Power Plant No. 3 Area
Sample Locations

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20 SWMU 25, ROBERTS LANDFILL

20.1 BACKGROUND

Roberts Landfill (SWMU 25) is located approximately 1 mile southwest of the downtown area of Adak. The landfill covers approximately 15 acres. The landfill operated from the early 1950s until 1972 and from 1975 through 2002. During the initial operation, wastes included sanitary trash, metal debris, batteries, solvents, waste paints and construction rubble. From 1975 until closure at the end of 2002, the landfill accepted only sanitary trash. Roberts Landfill is unlined (Navy 2001b).

Closure activities initially began at Roberts Landfill in April 1997 and included placing a low-permeability soil cover over the landfill, grading and contouring, implementing access restrictions, installing surface water/erosion controls, placing a vegetative cover, securing adjacent bunkers filled with asbestos materials, maintaining the cover, performing periodic monitoring and providing ICs for land use. In March 2002, the Navy submitted a permit renewal application to extend operations at Roberts Landfill through 2002. The application was made to accommodate operation of an inert demolition waste mono-fill and one cell for disposal of approximately 10 cubic yards of asbestos-containing material (Navy 2002). The fill operation was in support of the Navy's cabin demolition project, which was completed in September 2002, at which time the landfill was re-graded and covered. Following that activity, the Navy applied for and received approval for closure from ADEC at the end of 2002 (Navy 2002).

20.2 SAMPLING HISTORY RELATED TO CLOSURE MONITORING

Groundwater and surface water have been sampled at the Roberts Landfill periodically since March 1996. To date, 20 sampling events have occurred from 1996 through 2013 (see Table 2-2). Historically, sampling at Roberts Landfill has consisted of four quarterly rounds and 16 annual rounds of sampling at four monitoring wells and five surface water locations. The quarterly sampling rounds were completed in March, June, September and October of 1996. Fifteen annual sampling rounds were subsequently completed in December 1997, June 1998, September 1999, November 2000, September 2001, October 2002 and 2003, and September 2004 through 2011. Sampling was then reduced to biennially, and sampling occurred in September 2013. In 2011, a seep was identified northwest of the landfill in the Adak Fuels Facility and collection of surface water at this location was added to the

sampling program. The analytical results from the sampling conducted at Roberts Landfill from 1996 through 2013 are summarized in Appendix C-2.

20.3 DISCUSSION OF RESULTS

During the 2013 LTM field event, surface water and groundwater samples were collected at Roberts Landfill as specified in the CMP, Revision 5 (Navy 2012a) and in the 2013 Revised CMP Tables (Navy 2013a). The samples were submitted to an off-site laboratory for analysis. The locations where surface water and groundwater samples were collected during the 2013 LTM sampling event are shown on Figures 20-1 and 20-2. Field forms and logbooks are provided in Appendix A. Photographs of the site and sampling locations are presented in Appendix I. Field water quality parameters and monitoring well methane readings collected during sampling are presented in Appendix D-3. The analytical results from the 2013 sampling event for surface water and groundwater are summarized in Tables 20-1 and 20-2, respectively. Analytical results were compared to the endpoint criteria listed in Table 3-4. The results for all analytes are provided in Appendix F.

Visual inspections of the groundwater monitoring wells at Roberts Landfill were also completed during the groundwater sampling event. All wells were functional at the time of inspection. Methane was measured in the head space of each well using a lower explosive limit meter and was recorded in the logbooks (Appendix A) and summarized in Appendix D-3. None of the well head spaces had measurable methane readings.

Visual inspections of the surface water sampling locations were also completed during the LTM field event and field inspection forms are presented in Appendix A. Five surface water samples were collected from Mitt Creek and unnamed perennial streams flowing from SWMU 25, Roberts Landfill into Mitt Creek and Mitt Lake. No visible contamination was observed at any of these sample locations.

A groundwater seep first observed in 2011 north of SWMU 25, Roberts Landfill in the Adak Fuels Facility was sampled and visually inspected (Figure 20-1). Bright blue and white crystals among areas of black discoloring were observed at the seep and the ditch water was discolored milky white and brown. Visual inspections are discussed in more detail below and in Section 4.1.3. IC inspections were conducted during the 2013 monitoring event and are reported in the 2013 IC Site Inspection Report (Navy 2013e).

20.3.1 Surface Water

Surface water samples were collected from six locations from Mitt Lake, Mitt Creek and perennial streams flowing from the landfill (RLSW03 through RLSW05, NL-11, NL-12 and NL-14). Surface water had been planned for collection from locations RLSW01 and RLSW02 (located in landfill swales), but these locations were dry during the field event and samples could not be collected.

Sample RLSW05 was collected from a small unnamed stream that flows downgradient from the southwest side of the landfill into Mitt Lake. The overland surface water pathway of this stream was visually confirmed in 2012 during the annual IC inspection (Navy 2013e). This inspection revealed that water from the small pond located on the southwest portion of the landfill appeared to be flowing south into roadside ditches and then overland via perennial streams southeast to sample location RLSW05. Analytical results for surface water collected at this location have indicated aluminum and copper concentrations exceeding endpoint criteria for several years.

Sample RLSW04 was collected from Mitt Creek east of the landfill, east of Happy Valley Road, approximately 1,000 feet downstream of Mitt Lake and RLSW05 and upstream of the confluence of two intermittent streams that flow from RLSW03 location into Mitt Creek (Figure 20-2).

Sample RLSW03 (includes duplicate RLSW13) was collected from an intermittent stream that flows from the east side of the landfill north of the old Veterans of Foreign Wars building. Analytical results for surface water collected at location RLSW03 have indicated aluminum and copper concentrations exceeding endpoint criteria for several years. The surface water pathway downgradient of location RLSW03 was confirmed during the 2009 field event to assess whether contaminants from this location could be impacting Mitt Creek or Sweeper Cove. Surface water was found to flow from the sampling location along two pathways, one to the northeast and one to the southeast. The surface water pathways are illustrated in Figure 20-2. Surface water travels along both pathways via ditches and overland sheet flow, passes under Happy Valley Road via culverts and eventually converges with Mitt Creek at two separate locations downgradient of locations RLSW03 and RLSW04.

Two surface water samples (NL-11 and NL-12) were collected at the two confluences of the overland surface water pathways and Mitt Creek. Surface water sample NL-11 is located in the southern drainage immediately upgradient of the confluence with Mitt Creek and was collected to determine whether contaminants from RLSW03 have migrated to the creek.

Surface water sample NL-12 was collected in Mitt Creek immediately downgradient of the confluence with the northern drainage (Figure 20-2) and represents the most downgradient sampling location in Mitt Creek.

Surface water location (NL-14) was also sampled at the groundwater seep identified in 2011 northwest of the landfill in the Adak Fuels Facility (Figure 20-1). The seep is located approximately 10 feet southwest from the Adak Fuels Facility tank access road. The seep is approximately 20 feet by 4 feet in area minimally flowing from the hillside 4 feet into a roadside ditch. The seep is characterized by brilliant blue, green and white crystallization with areas of black discoloring and henceforth referenced as "blue seep." A concentrated blue-green tinted milky substance was observed seeping into the surface water of the ditch at the sample location NL-14 and diluting to a milky white to milky brown color. Water in the ditch was not flowing during the sampling. Photographs of all locations are included in Appendix I.

Surface water samples RLSW03, RLSW04 and RLSW05 were analyzed for the following:

- Total priority pollutant metals and aluminum (EPA Methods 6020A/7470A)
- Dissolved priority pollutant metals and aluminum (EPA Methods 6020A/7470A)
- VOCs (EPA 8260C)
- Water quality parameters alkalinity, sulfate, total dissolved solids, ammonia, total Kjeldahl nitrogen and chemical oxygen demand (American Society for Testing and Materials [ASTM] D1426-93B; EPA 300.0; and Standard Methods 2320B, 2540C, 4500-NH3-G and 5220C)

Surface water samples NL-11, NL-12 and NL-14 were analyzed for the following:

- Total priority pollutant metals and aluminum (EPA Methods 6020A/7470A)
- Dissolved priority pollutant metals and aluminum (EPA Methods 6020A/7470A)
- Water quality parameters (ASTM D1426-93B; EPA 300.0; and Standard Methods 2320B, 2540C, 4500-NH3-G and 5220C)

A summary of the analytical results from the 2013 sampling event and the endpoint criteria are provided for surface water in Table 20-1. Analytical results for VOCs, total and dissolved metals and the water quality parameters in the surface water samples collected at SWMU 25, Roberts Landfill in 2013 are discussed below.

20.3.1.1 Metals Analytes

Two target metal analytes were detected at concentrations greater than the endpoint criteria: total and dissolved copper and total and dissolved aluminum. Total copper was detected above the endpoint criteria at four locations: RLSW03, RLSW05, NL-11 and NL-14, at concentrations of 70.4 µg/L, 25.2 µg/L, 31.4 µg/L and 17.5 µg/L, respectively. The endpoint criteria of total copper is 12 µg/L, which is based on the Alaska Water Quality Standard (18 AAC 70) for aquatic life.

Dissolved copper exceeded criteria in sample RLSW03 at 77.5 µg/L and in sample RLSW05 at 25.4 µg/L, indicating that the copper at these locations is dissolved. Dissolved copper also exceeded criteria at location NL-11 at 24.7 µg/L (about 80% of the total value), indicating that about 20% of the copper observed at this location is in particulate form. Dissolved copper was observed in NL-14 at the blue seep location at 2.21 µg/L, which is below endpoint criteria and indicates that nearly all the copper observed at this location is in particulate form.

Total and dissolved aluminum were detected above endpoint criteria at location RLSW03 at concentrations of 1,410 µg/L and 356 µg/L, respectively, which are above the endpoint of 87 µg/L for aquatic life criteria for total and dissolved aluminum. This indicates that aluminum observed at this location is primarily in the solid phase. Total aluminum was also detected above endpoint criteria at location NL-14 at 180 µg/L. The dissolved aluminum concentration was below detection indicating that aluminum at this location is also in particulate form.

20.3.1.2 Volatile Organic Compounds

VOCs were not detected at or above endpoint criteria in any of the SWMU 25, Roberts Landfill surface water samples collected during the 2013 sampling event (RLSW03, RLSW04 and RLSW05). Results for target VOCs are presented in Table 20-1. Results for the full VOC suite of analysis are included in Appendix F.

20.3.1.3 Water Quality Parameters

Total alkalinity was measured at concentrations greater than the quantitation limit of 2 mg/L in five of the six surface water samples, up to a maximum concentration of 167 mg/L at NL-14. Sulfate was measured in all surface water samples at concentrations ranging from 23.8 mg/L to 58.5 mg/L. Total dissolved solids were measured in all surface water samples at concentrations ranging from 111 mg/L to 312 mg/L.

Table 20-1. Summary of Surface Water Analytical Results at SWMU 25, Roberts Landfill

	Location							Endpoint Criteria: Alaska Water Quality Standards, 18 AAC 70[2]	
Target Analyte	**RLSW03 9/9/13**	**RLSW03D[1] 9/9/13**	**RLSW04 9/9/13**	**RLSW05 9/9/13**	**NL-11 9/10/13**	**NL-12 9/10/13**	**NL-14 9/9/13**	**Aquatic Life**	**Human Health**
Volatile Organic Compounds (µg/L)									
1,1-Dichloroethene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	320
1,3-Dichlorobenzene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	2,600
1,4-Dichlorobenzene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	2,600
Benzene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	710[3]
Chlorobenzene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	488
cis-1,2-Dichloroethene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	None
Ethylbenzene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	3,280
Tetrachloroethene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	88.5
Toluene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	424,000
trans-1,2-Dichloroethene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	None
Trichloroethene	0.50 U	NP	0.50 U	0.50 U	NP	NP	NP	None	810
Xylenes, total	1.0 U	NP	1.0 U	1.0 U	NP	NP	NP	None	None
Total Metals (µg/L)									
Aluminum	**1,410**	NP	26.9	12.9	21.3	38.0	**180**	87	None
Antimony	0.05 U	NP	0.19	0.16	0.07	0.12	0.05 U	None	45,000
Arsenic	0.20 J	NP	0.17 J	0.15 J	0.17 J	0.16 J	0.62	190	1.4[3]
Beryllium	0.031	NP	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	190	1.4
Cadmium	0.046	NP	0.030 U	0.030 U	0.042	0.030 U	0.140	1.1[4]	None
Chromium	0.20 U	NP	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	210[4,5]	None
Copper	**70.4 J**	NP	1.98 J	**25.2 J**	**31.4 J**	1.90 J	**17.5 J**	12[4]	None
Lead	0.460	NP	0.099	0.006 J	0.007 J	0.073	0.272	3.2[4]	None
Mercury	0.02 U[6]	NP	0.02 U[6]	0.02 U[6]	0.02 U[6]	0.02 U[6]	0.02 U[6]	0.012	0.15
Nickel	2.68 J	NP	0.76 J	1.32 J	1.86 J	0.63 J	2.48 J	160[4]	100
Selenium	0.9 J	NP	0.3 J	0.7 J	0.6 J	0.4 J	1.4 J	5	None
Silver	0.030 U	NP	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.12	None
Thallium	0.030 U	NP	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	None	48
Zinc	11.46	NP	1.68	4.30	10.02	3.95	41.90	110[4]	None

Table 20-1. Summary of Surface Water Analytical Results at SWMU 25, Roberts Landfill (continued)

	Location							Endpoint Criteria: Alaska Water Quality Standards, 18 AAC 70[2]	
Target Analyte	**RLSW03 9/9/13**	**RLSW03D[1] 9/9/13**	**RLSW04 9/9/13**	**RLSW05 9/9/13**	**NL-11 9/10/13**	**NL-12 9/10/13**	**NL-14 9/9/13**	**Aquatic Life**	**Human Health**
Dissolved Metals (µg/L)									
Aluminum	**356**	NP	15.4	10.4	2.8 U	8.1	2.4 U	87	None
Antimony	0.05 U	NP	0.17	0.15	0.05 U	0.10 U	0.05 U	None	45,000
Arsenic	0.12 J	NP	0.50 U	0.09 J	0.13 J	0.11 J	0.39 J	None	1.4[3]
Beryllium	0.033	NP	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	190	1.4
Cadmium	0.056	NP	0.006 J	0.021 J	0.046	0.030 U	0.063	1.14	None
Chromium	0.06 J	NP	0.13 J	0.09 J	0.06 J	0.11 J	0.20 J	210[4,5]	None
Copper	**77.5**	NP	2.06	**25.4**	**24.7**	2.02	2.21	12[4]	None
Lead	0.454	NP	0.051	0.007 J	0.007 J	0.028 J	0.013 J	3.2[4]	None
Mercury	0.02 U[6]	NP	0.02 U[6]	0.02 U[6]	0.02 U[6]	0.02 U[6]	0.02 U[6]	0.012	0.15
Nickel	3.17	NP	0.88	1.64	2.44	1.02	2.38	160[4]	100
Selenium	0.5 J	NP	0.4 J	0.3 J	1.5 U	1.5 U	1.2 J	5	None
Silver	0.030 U	NP	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.12	None
Thallium	0.030 U	NP	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	None	48
Zinc	12.25	NP	2.49	4.50	11.46	3.00	30.19	110[4]	None
Water Quality Parameters (mg/L)									
Total alkalinity	2.6 U	2.0 U	36.0	22.7 U	20.5	33.4	167	None	None
Sulfate	58.0	58.2	25.0	27.6	48.0	23.8	58.5	None	None
TDS	152	115	111	127	155	113	312	None	None
COD	5.0 U	5.0 U	10.9	3.5 J	5.0 U	5.0 J	10.4	None	None
TKN	0.29 J	0.30 J	0.29 J	0.28 J	0.28 J	0.25 J	0.51	None	None
Ammonia	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	None	None

Notes:
[1] Field duplicate sample at location RLSW03
[2] Criteria that existed in 18 AAC 70 when ROD for OU A and landfills were signed. (Changes to some of these criteria were adopted in an 18 AAC 70 amendment on March 24, 2003.)
[3] Human health criteria for carcinogens come from EPA promulgation of human health criteria for carcinogens for Alaska at the 10^{-5} risk level in the National Toxics Rule (40 Code of Federal Regulations 131.36) in accordance with ADEC guidance.
[4] At 100 milligrams per liter hardness
[5] Value provided is for chromium III. The criteria for chromium VI is 11 µg/L.
[6] Value is the method detection limit because the quantitation limit is greater than the endpoint criteria.
Bold indicates reported concentration is greater than the endpoint criteria.

Chemical oxygen demand was measured at concentrations greater than the quantitation limit of 5 mg/L in two samples (10.9 mg/L at RLSW04 and 10.4 mg/L at NL-14). Total Kjeldahl nitrogen was detected at concentrations in all samples ranging from an estimated 0.25 mg/L up to 0.51 mg/L. Ammonia was not detected above the quantitation limit of 0.05 mg/L in any of the surface water samples.

20.3.2 Groundwater

Groundwater samples were collected from four monitoring wells (A-2, A-3, A-5 and B-1). Two of the monitoring wells (A-3 and A-5) are located downgradient of Roberts Landfill along the eastern flank. Well A-2 is located downgradient of the western flank of the landfill, and Well B-1 is located south of the landfill. All groundwater sampling locations are shown on Figure 20-1.

All groundwater samples were analyzed for the following:

- Total priority pollutant metals and aluminum (EPA Methods 6020A/7470A)
- Dissolved priority pollutant metals and aluminum (EPA Methods 6020A/7470A)
- VOCs (EPA 8260C)
- Water quality parameters (ASTM D1426-93B; EPA 300.0; and Standard Methods 2320B, 2540C, 4500-NH3-G and 5220C)

A summary of the analytical results for groundwater samples collected during the 2013 monitoring event and endpoint criteria are presented in Table 20-2 and discussed below. The analytical results for all compounds are presented in Appendix F. VOC samples are collected biennially as per the CMP, Revision 5 (Navy 2012a) and were collected during the 2013 LTM field event.

20.3.2.1 Metals Analytes

No dissolved or total inorganics included on the target analyte list for the Roberts Landfill were detected above the endpoint criteria in any groundwater sample. Analytical results for total and dissolved inorganic analytes are presented in Table 20-2 and Appendix F. Groundwater daylighting from the landfill is suspected at least in part to be the source for the perennial streams and blue seep at which surface water samples RLSW05, RLSW03, NL-11 and NL-14 were collected which exceeded endpoint criteria for one or both aluminum and copper. It should therefore be noted that although no endpoint criteria exist

for aluminum in groundwater, groundwater exceeded surface water endpoint criteria of 87 µg/L for aluminum in wells A-3 (509 µg/L total; 261 µg/L dissolved), A-5 (163 µg/L total; dissolved not detected) and B-1 (999 µg/L total; 940 µg/L dissolved) which are located upgradient of surface water locations RLSW05, RLSW03 and NL-11. Similarly, samples did not exceed copper groundwater endpoint criteria but did exceed the endpoint criteria for copper **in surface water** of 12 µg/L in wells A-3 (56.9 µg/L total; 44.8 µg/L dissolved) and B-1 (28.1 µg/L total; 27.0 µg/L dissolved).

20.3.2.2 Volatile Organic Compounds

VOCs were not detected at or above endpoint criteria in any of the Roberts Landfill groundwater samples collected during the 2013 sampling event. Results for select VOCs are presented in Table 20-2. Results for the full suite of VOCs analyzed by EPA Method 8260C are presented in Appendix F.

20.3.2.3 Water Quality Parameters

Total alkalinity was only detected in groundwater samples at locations A-2 and A-5 at concentrations of 112 mg/L and 39.2 mg/L, respectively. Sulfate was observed in all groundwater samples at concentrations ranging from 25.7 mg/L to 57.5 mg/L. Chemical oxygen demand was not detected at or above the quantitation limit of 5.0 mg/L in any of the groundwater samples. Total dissolved solids were observed in all groundwater samples from 89 mg/L to 202 mg/L. Total Kjeldahl nitrogen was detected in all wells at concentrations below quantitation limits from 0.28 mg/L to 0.33 mg/L. Ammonia was not observed over the quantitation limit of 0.050 mg/L in any of the groundwater samples.

Table 20-2. Summary of Groundwater Analytical Results at SWMU 25, Roberts Landfill

	Location					Endpoint Criteria
Target Analyte	**A-2 9/9/13**	**A-2D[1] 9/9/13**	**A-3 9/10/13**	**A-5 9/9/13**	**B-1 9/9/13**	**Alaska Cleanup Level 18 AAC 75.345**
Volatile Organic Compounds (µg/L)						
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	7
1,3-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	None
1,4-Dichlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	None
Benzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5
Chlorobenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	None
cis-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	70
Ethylbenzene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	700
Tetrachloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5
Toluene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1,000
trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	100
Trichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5
Xylenes (total)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10,000
Total Metals (µg/L)						
Aluminum	41.7	42.0	508	163	999	None
Antimony	0.03 J	0.05 U	0.04 J	0.05 U	0.05 U	6
Arsenic	1.6	1.6	0.10 J	0.48 J	0.17 J	50
Beryllium	0.030 U	0.030 U	0.030 U	0.030 U	0.055	4
Cadmium	0.030 U	0.030 U	0.032 U	0.030 U	0.130	5
Chromium	0.20 U	0.20 U	1.01	0.32 U	0.20 U	100
Copper	0.87 J	0.82 J	56.9	6.82 J	28.1 J	1,300
Lead	0.083	0.084	0.072	0.081	0.024 J	15
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2
Nickel	2.49 J	2.53 J	5.20 J	2.28 J	3.87 J	100
Selenium	0.5 J	0.3 J	0.7 J	0.4 J	0.6 J	50
Silver	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	180
Thallium	0.030 U	0.030 U	0.030 U	0.030 U	0.062	2
Zinc	4.59	4.37	3.62	4.68	17.37	11,000
Dissolved Metals (µg/L)						
Aluminum	4.3	4.4	261	2.6 U	940	None
Antimony	0.03 J	0.05 U	0.05 U	0.05 U	0.05 U	6
Arsenic	1.5	1.4	0.10 J	0.25 J	0.14 J	50
Beryllium	0.030 U	0.030 U	0.030 U	0.030 U	0.057	4
Cadmium	0.030 U	0.030 U	0.031 U	0.030 U	0.116	5
Chromium	0.05 J	0.20 U	0.35	0.20 U	0.20 U	100
Copper	0.25	0.29	44.8	0.52	27.0	1,300
Lead	0.014 J	0.014 J	0.026 J	0.009 J	0.012 J	15
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2
Nickel	2.06	2.03	5.15	2.05	3.71	100
Selenium	0.3 J	1.5 U	0.6 J	0.4 J	0.3 J	50
Silver	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	180

Table 20-2. Summary of Groundwater Analytical Results at SWMU 25, Roberts Landfill (continued)

	Location					Endpoint Criteria
Target Analyte	**A-2 9/9/13**	**A-2D[1] 9/9/13**	**A-3 9/10/13**	**A-5 9/9/13**	**B-1 9/9/13**	**Alaska Cleanup Level 18 AAC 75.345**
Thallium	0.030 U	0.030 U	0.030 U	0.030 U	0.054	2
Zinc	4.26	4.44	3.49	4.49	16.66	11,000
Water Quality Parameters (mg/L)						
Total alkalinity	112	NP	2.0 U	39.3	2.0 U	None
Sulfate	38.6	NP	25.7	46.0	57.5	None
TDS	202	NP	89	180	133	None
COD	5.0 U	NP	5.0 U	5.0 U	5.0 U	None
TKN	0.29 J	NP	0.33 J	0.28 J	0.31 J	None
Ammonia	0.022 J	NP	0.050 U	0.050 U	0.050 U	None

Note:
[1]Field duplicate sample at location A-2

20.4 CONCLUSIONS

The analytical data for the period 2001 through 2013 were reviewed for the compounds included on the target analyte list. The purpose of the recent historical data analysis is to determine whether trends exist in the concentration data for SWMU 25, Roberts Landfill.

20.4.1 Surface Water Metals Analytes

At sample locations RLSW01, RLSW02 and RLSW04, aluminum and copper concentrations have remained below endpoint criteria since monitoring began in 2003. Total aluminum and copper have been detected at concentrations above the endpoint criteria at surface water location RLSW03, which is located downgradient from the eastern perimeter of the landfill, since monitoring began in 1996. Since 2003, total aluminum concentrations have ranged from 1,250 µg/L to 3,700 µg/L, and total copper concentrations have ranged from 65.5/L µg to 161 µg/L, at this location. These aluminum and copper concentrations have been variable and do not appear to exhibit any increasing or decreasing trends. The continued exceedance of copper endpoint criteria in surface water sample NL-11 collected downgradient from RLSW03 indicates that copper may be migrating toward Mitt Creek from this location. However, sample NL-12, which was collected further downstream in Mitt Creek, continues to not exceed copper endpoint criteria, indicating that contaminants from NL-11 and RLSW03 are not adversely impacting Mitt Creek.

Total copper concentrations have also exceeded endpoint criteria at location RLSW05, collected from an unnamed stream downgradient of the southeast side of Roberts Landfill that flows into Mitt Lake. Copper has ranged from 20.8/L µg to 54.1 µg/L at this location since 2001 and has exhibited no obvious trend in concentration. Total aluminum concentrations have not exceeded endpoint criteria at location RLSW05 since 2002 and have shown a steadily decreasing trend.

In seep sample NL-14, total copper analytical results were slightly above the 12 µg/L endpoint criteria, at 17.5 µg/L, but the dissolved copper results were less than the criteria, at 2.21 µg/L, indicating that most of the copper is in particulate form. Similarly, total aluminum was above the 87 µg/L endpoint criteria at 180 µg/L, but the dissolved aluminum result was non-detected at less than 2.4 µg/L. The seep is characterized by bright blue and white crystals among areas of black discoloring on the hillside where the seep emerges and the ditch water located a few feet directly below was discolored milky white and brown. Most likely precipitation of metals is occurring when the groundwater daylights and oxidizes. The pH pf NL-14 was 7.69 and is neutral. The low flow of the seep prevented the sample from being taken directly at the location that the groundwater daylights. However, the surface water in the ditch directly below this should be indicative of seeping contamination.

In general, concentrations of other inorganic compounds have also steadily decreased or have remained steady at low concentrations in surface waters monitored from 1995 through 2013. Total zinc was detected during 2002, 2003 and 2006 sampling events at concentrations greater than the endpoint criteria, but it was not detected above the endpoint criteria during any other sampling events. Total mercury was detected above the endpoint criteria once at RLSW01, in 1997. Dissolved mercury was detected at a concentration above the endpoint criteria at only one location during the 2006 sampling event. Total beryllium was detected once above the endpoint criteria at RLSW05, in 1999. All of the other inorganics included on the target analyte list for Roberts Landfill were either not detected or detected at concentrations less than the endpoint criteria.

20.4.2 Groundwater Metals Analytes

No dissolved or total inorganics included on the target analyte list for the Roberts Landfill groundwater samples were detected above the endpoint criteria during 2013. In 2010, total chromium was detected at a concentration above the endpoint criteria at sample location A-3. However, the total chromium exceedance was suspected to be biased high

because A-3 was purged dry and did not stabilize and because turbidity was very high in the sample, at 608 NTUs. This suspicion was further confirmed by the low chromium concentration observed in the filtered (dissolved) sample. Well A-3 has historically contained insufficient water, and in the past has been purged dry and then allowed to recharge. In 2003, total chromium, lead and nickel were detected above the endpoint criteria in well A-3 at concentrations of 323 µg/L, 36.9 µg/L and 113 µg/L, respectively; while dissolved concentrations were observed at the much lower concentrations of 1.41 µg/L, 0.163 µg/L and 2.29 µg/L, respectively. These analytes were not detected above the endpoint criteria during the 2001 through 2013 sampling events at the remaining locations, and the elevated 2003 concentrations are suspected to be attributable to particulate matter in the sample. In 2013, repairs were made to this well which included redevelopment. All compounds were detected below their respective endpoint criteria in well A-3 in 2013 and WQPs showed improved water quality with low concentrations of total alkalinity, TDS, COD,TKN and ammonia.

Total aluminum has been measured in groundwater samples from 1997 through 2013 (Appendix C-2). An endpoint criterion has not been established for aluminum in groundwater. Total aluminum concentrations in groundwater samples from well A-3 have fluctuated regularly, beginning with 861 µg/L in 1997, a peak of 153,000 µg/L in 2003, a low of 822 µg/L in 2006, up to 3,210 µg/L in 2008 and falling to 1,020 µg/L in 2009. In 2010, total aluminum increased to 38,600 µg/L in groundwater at sample location A-3 but fell back to 508 µg/L in 2013. These fluctuations are likely attributable to the historical lack of sufficient water in this well and the resulting high particulate matter in the samples.

20.5 RECOMMENDATIONS

Groundwater collected from Roberts Landfill did not exceed any endpoint criteria. Because VOCs have not exceeded endpoint criteria in any groundwater or surface water sample since monitoring began in 1996, it is recoomended that sampling for VOCs at this site be reduced to once every 5 year period to coincide with the Landfill Monitoring for 5-Year Sites listed in Table 2-6. Therefore, VOC monitoring will occur in 2014, 2018 and 2024 to support the 5-year review process. It is recommended that all other monitoring at well locations be continued biennially as prescribed to monitor the integrity of the landfill.

Because of the continued exceedances of the endpoint criteria in surface water samples for copper and aluminum, the Navy recommends that surface water monitoring for inorganics continue biennially at the prescribed locations RLSW01 through RLSW05. The source of the

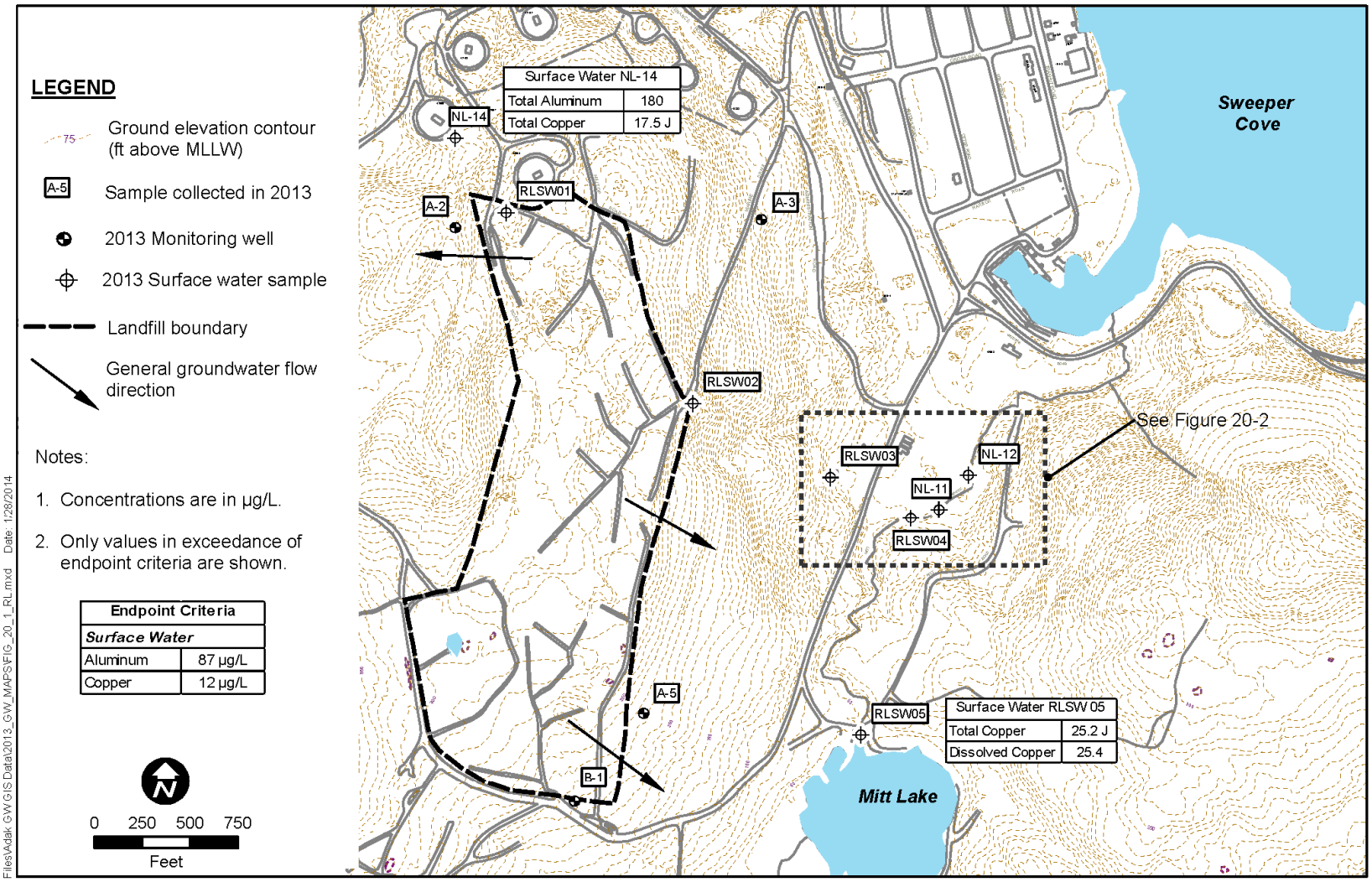
continued exceedance of copper in surface water at location RLSW03 is likely groundwater as characterized in samples collected from well A-3. Groundwater collected from these locations was observed to contain copper concentrations at 56.9 µg/L and 44.8 µg/L for total and dissolved copper, respectively, and aluminum concentrations at 508 µg/L and 261 µg/L for total and dissolved aluminum, respectively. While groundwater at this location does not exceed the copper groundwater endpoint criteria of 1,300 µg/L and no endpoint criteria for aluminum is established for groundwater, it is likely that groundwater discharge from this location is contributing to the perennial stream where RLSW03 is located. The surface water endpoint criterion for copper and aluminum is 12 µg/L and 87 µg/L, respectively.

Similar to RLSW03, the suspected source of the continued observance of exceedance of copper endpoint criteria at surface water location RLSW05 is groundwater discharge into surface drainages from the south side of the landfill that contributes to the perennial stream flow at this location. Copper groundwater concentrations in well B-1 upgradient of RLSW05 in 2013 were 28.1 µg/L and 27.0 µg/L for total and dissolved copper, respectively, which exceed surface water endpoint. These groundwater concentrations are equivalent to the concentrations of 25.2 µg/L (total copper) and 25.4 µg/L (dissolved copper) observed at location RLSW05. However, it should be noted that while concentrations of aluminum in well B-1 were high (999 µg/L total and 940 µg/L dissolved) that were not reflected in downgradient surface water sample RLSW05 which were 12.9 µg/L (total aluminum) and 10.4 µg/L (dissolved aluminum). Therefore, the source of copper exceedances at this location remains uncertain.

Surface water NL-11 collected downstream of RLSW03 in a drainage flowing into Mitt Creek was found to exceed copper endpoint criteria indicating that contaminates are migrating downstream from RLSW03. However, surface water collected from both locations in Mitt Creek (RLSW04 downgradient from Mitt Lake, and NL-12 collected in Mitt Creek further downstream and below NL-11) did not exceed any endpoint criteria. This indicates that potential contaminants entering Mitt Creek from perennial stream flowing from the landfill are not causing water quality in Mitt Creek to exceed risk-based criteria. On the basis of these observations, it is recommended that all surface water locations continue be sampled biennially in the Mitt Creek watershed to monitor target compound concentrations in Mitt Creek.

Sample NL-14 was collected from the blue groundwater seep northwest of the landfill in the Adak Fuels Facility. The seep was characterized by a bright blue and white precipitate, indicating the possible presence of copper sulfate. Total copper analytical results were

slightly above the 12 µg/L endpoint criteria, at 17.5 µg/L, but the dissolved copper results were less than the criteria, at 2.21 µg/L, indicating that most of the copper is in particulate form. Similarly, total aluminum was above the 87 µg/L endpoint criteria at 180 µg/L, but the dissolved aluminum result was non-detected at less than 2.4 µg/L. It appears unlikely that contaminants from this location would impact ecological targets because of the low concentrations of dissolved aluminum and copper and there is no overland surface water pathway to downgradient receptors. However, it is recommended that sampling at this location for total and dissolved priority pollutant metals and aluminum be added to the monitoring program for SWMU 25, Roberts Landfill to monitor the seep.



U.S. NAVY	SEALASKA	Figure 20-1 SWMU 25, Roberts Landfill Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

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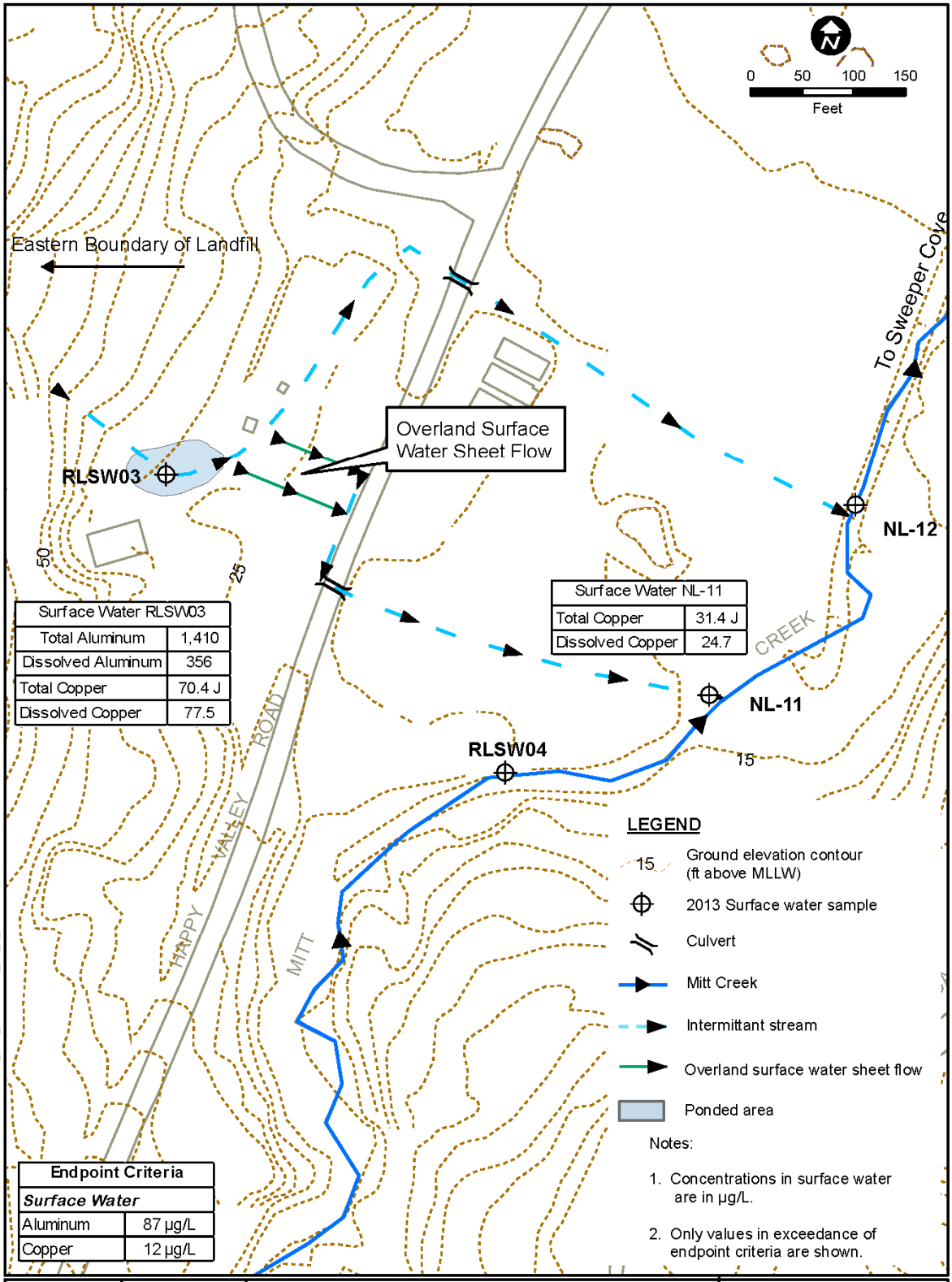

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U.S. NAVY	SEALASKA	Figure 20-2 SWMU 25, Roberts Landfill Overland Surface Water Pathway and Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

21 SWMU 55, PUBLIC WORKS TRANSPORTATION DEPARTMENT WASTE STORAGE AREA

This section presents the results of groundwater monitoring performed at the SWMU 55, Public Works Transportation Department Waste Storage Area site during September 2013. Compliance monitoring is the selected remedy for this site (Navy, ADEC and EPA 2000). To comply with requirements specified for this remedy, the Navy conducts periodic groundwater sampling and water level/product thickness monitoring at this site. Groundwater samples were collected in 2013 to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345).

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

21.1 FIELD MEASUREMENTS

The site is underlain by the thick sand sequence containing the Downtown Aquifer. Two monitoring wells were gauged on September 11, 2013. Table 21-1 provides the measured depth-to-water and the calculated groundwater elevations. Figure 21-1 shows the location of the wells, site topography and features, interpreted potentiometric surface and the interpreted groundwater flow direction. The historic groundwater elevation data, combined with the data obtained from wells in nearby SWMU 14 and SWMU 15 sites, indicate that the direction of groundwater flow beneath the site is to the south-southeast, toward Sweeper Cove. Groundwater elevations collected in 2013 were compared with historical data and is consistent with this interpretation.

Groundwater sampling was conducted in 2013 at one monitoring well (55-145) on September 11, 2013. Field measurements were recorded in the field forms and logbook during monitoring well sampling activities (Appendix A). Table 21-1 lists the final field measurements recorded at the monitoring well prior to sample collection. A review of the sampling data reported for this site indicates that prior to sample collection at well 55-145, groundwater parameters stabilized to within specified criteria.

Table 21-1. 2013 Field Measurements for SWMU 55 Public Works Transportation Department Waste Storage Area

	Physical Measurements				Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth–to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
55-145	21.40	16.95	4.45	0	7.02	0.239	0.0	5.25	7.52	0.00	138
55-146	21.25	17.64	3.61	0	NP	NP	NP	NP	NP	NP	NP

Notes:
The reported casing elevation is the surveyed elevation resident within the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

21.2 TARGET ANALYTE RESULTS

A groundwater sample was collected from well 55-145 and analyzed for select chlorinated VOCs and daughter products. Table 21-2 presents the analytical results and laboratory data qualifiers. Figure 21-1 shows the location of the well and the analytical results that exceeded the endpoint criteria. Historical analytical results obtained for this location are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

PCE was detected above the endpoint criterion (5 µg/L) at a concentration of 38 µg/L in well 55-145. Daughter product TCE was detected at 0.13 µg/L, which is below the endpoint criterion (5 µg/L). All other daughter products, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE and vinyl chloride were not detected in the sample.

Table 21-2. Analytical Results for Volatile Organic Compounds for SWMU 55, Public Works Transportation Department Waste Storage Area

Well Location	Year	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
55-145 Source Plume	2001	**180**	1 U	1 U	1 U	1 U	2 U
	2002	**130**	2 U	2 U	2 U	2 U	2 U
	2003	**170**	4 U	4 U	4 U	4 U	4 UJ
	2004	**112**	0.3 J	1 U	1 U	1 U	1U
	2005	**90.3**	1 U	1 U	1 U	1 U	1 U
	2006	**110**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	2007	**71 D**	0.27 J	0.50 U	0.50 U	0.50 U	0.50 U
	2008	**61**	0.32 J	0.50 U	0.50 U	0.50 U	0.50 U
	2009	**57**	0.17 J	0.50 U	0.50 U	0.50 U	0.50 U
	2010	**49**	0.22 J	0.50 U	0.50 U	0.50 U	0.50 U
	2011	**39**	0.17 J	0.50 U	0.50 U	0.50 U	0.50 U
	2012	NP	NP	NP	NP	NP	NP
	2013	**38**	0.13 J	0.50 U	0.50 U	0.50 U	0.50 U
Endpoint Criteria		5	5	7	70	100	2

Note:
Bold indicates reported concentration is greater than the endpoint criteria for groundwater used as a drinking water source.

21.3 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 or as updated (Navy 2012a). Trend evaluations were conducted for analytes exceeded endpoint criteria within the last two sampling events or for which there were less than four data points. Results of the Mann-Kendall and Sen's trend evaluations (worksheets and graphs provided in Appendix H) are summarized in Table 21-3. Based on statistical evaluation:

- Well 55-145: The PCE concentration exhibits a decreasing trend at both the 80 and 95 percent confidence intervals. The Sen's evaluation indicates a statistically significant decreasing trend, with a median slope of –10.5.

21.4 CONCLUSIONS

This section presents conclusions based on the groundwater monitoring conducted at the SWMU 55, Public Works Transportation Department Waste Storage Area in 2013. The conclusions are as follows:

- Groundwater Flow: The groundwater flow direction is south-southeast toward Sweeper Cove.
- Well 55-145: PCE was detected at a concentration of 38 µg/L, which exceeded the endpoint criterion of 5 µg/L. PCE exhibits a decreasing trend at both the 80 and 95 percent confidence intervals. The Sen's evaluation confirms this trend is statistically significant. Degradation products of PCE have not been detected above the laboratory minimum quantitation limit, with the exception of TCE, which had estimated detections less than 1.0 µg/L in 2004 and from 2007 through 2011 (below the endpoint criterion).

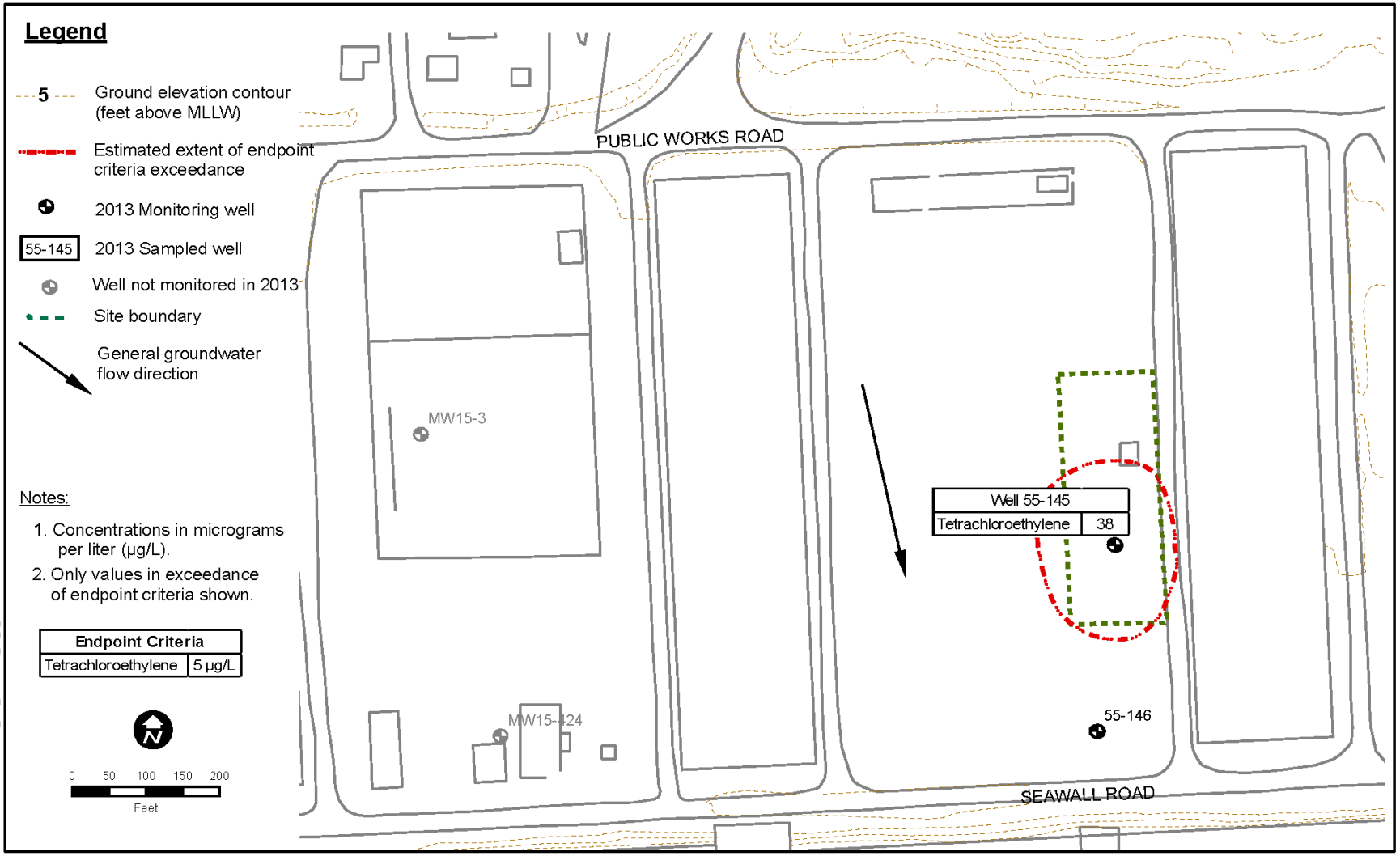
21.5 RECOMMENDATIONS

PCE concentrations exceed the endpoint criterion in well 55-145 but show statistically significant decreasing trends at the 80 percent confidence interval and have met the CMP, Revision 5 (Navy 2012a) secondary endpoint criterion. It is recommended that sampling for PCE and daughter products should continue as prescribed.

Table 21-3. Concentration Trend Evaluation for SWMU 55, Public Works Transportation Department Waste Storage Area

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Two Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
55-145	PCE	Yes	39	5	10	-43	Decreasing	Decreasing	NA	-10.5	Yes	--14	-9.2

Notes:
[1] Endpoint criteria are established from Alaska cleanup levels for groundwater used as a drinking water source.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).



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U.S. NAVY	SEALASKA	Figure 21-1 SWMU 55, Public Works Transportation Department Waste Storage Area Sample Location	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

22 SWMU 60, TANK FARM A

This section presents the results of groundwater monitoring performed at the SWMU 60, Tank Farm A site during 2013. MNA is the remedy selected for this site (Navy, ADEC and EPA 2000). To comply with requirements specified for this remedy, the Navy has conducted periodic groundwater sampling and water level/product thickness monitoring at the site. Groundwater samples have been collected to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345), to verify that natural attenuation is occurring and to monitor for surface water protection.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

22.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at six monitoring wells on August 30, 2013. Table 22-1 provides the measured depths-to-water (corrected for product thickness, if present) and the calculated groundwater elevations. Four monitoring wells were sampled on August 30 and 31, 2013. Two wells, 652 and 653, had measurable free product greater than 0.02 feet in thickness; therefore samples were not collected as planned. Figure 22-1 shows the locations of the wells relative to surface features, analytical results that exceeded endpoint criteria and site topography.

The site is divided into two areas of upper and lower elevations. The upper elevation part of the site is underlain by a relatively thin layer of tephra and glacial till overlying bedrock. The lower elevation part is underlain by a thin strip of sandy aquifer bounded between the hillside to the west and South Sweeper Creek/Sweeper Cove to the east. The analysis of limited historic groundwater elevation data and the hydrogeological setting of the site indicate that the groundwater flow direction in the upland area follows site topography and flows southeast toward South Sweeper Creek in the lowland area. Groundwater elevation data collected in 2013 were compared to historical data and are consistent with this interpretation.

Table 22-1. 2013 Field Measurements for SWMU 60, Tank Farm A

Physical Measurements					Water Quality Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
Groundwater Samples											
650	13.11	10.00	3.11	0	6.12	0.999	39.6	0.00	8.67	0.00	-103
651	12.08	9.10	2.98	0	6.19	0.204	0	0.00	9.42	0.01	-1
652	12.37	9.53[1]	2.84	0.03	FP	FP	FP	FP	FP	FP	FP
653	15.10	11.75[1]	3.35	0.05	FP	FP	FP	FP	FP	FP	FP
LC5A	10.86	6.95	3.91	0	6.64	0.213	0	0.00	11.38	0.00	-31
MW-E006	156.42	6.38	150.04	0	6.54	0.310	0	0.00	9.02	0.00	-38
Surface Water Samples											
852	NA	NA	NA	NA	5.89	6.55	23	6.42	10.02	0.21	-101

Notes:
[1] Corrected for presence of free product in the well.
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

Field measurements were recorded on field data forms and logbooks during monitoring well sampling activities (Appendix A). Table 22-1 lists the final field measurements recorded at each water sampling location prior to sample collection. A review of the sampling data reported for the site indicates that three wells (LC5A, 650 and MW E006) stabilized prior to sample collection. The remaining well (651) did not stabilize, which required three casing volumes of groundwater be removed from the well prior to sampling per CMP, Revision 5 (Navy 2012a). The 2013 analytical results in this well are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

A shoreline inspection was performed from the mouth of South Sweeper Creek along the western shoreline to the top of Sweeper Creek lagoon. One petroleum seep is located in South Sweeper Creek on the western shoreline of the lagoon downgradient of SWMU 60, Tank Farm A, well LC5A. The area of shoreline affected by the seep is approximately 15 feet by 5 feet in area and located north and adjacent to the west culvert (Figure 22-1). This seep is characterized by oily sediments, sheen on surface water and heavy petroleum odors which were noted during the shoreline inspection performed in 2013. A second area with sheen approximately 4 feet by 3 feet in area was observed just inside the north end of boom 10.

A surface water/sediment sample was collected at the seep at location 852 on August 31, 2013 and analyzed for petroleum hydrocarbons to determine if natural recovery is progressing. In 2012, the culvert at boom location 10 partially collapsed and water ceased flowing through the culvert into Sweeper Creek next to sample location 852. Since then, surface water at location 852 (in 2012 and 2013) has been collected approximately 75 feet east of the sediment sample location since no water has been present at the sediment location which is collected during low tide. DRO concentrations in surface water at this location fell below endpoint criteria for the second time since 2008. This corresponds with the collapse of the culvert and lack of surface water near the seep location during sampling. DRO concentrations in sediment decreased from 10,000 mg/kg in 2012 to 2,000 mg/kg in 2013 (described in more detail below). Petroleum sheen and odor were observed when sediments were disturbed during the sample collection at location 852. Results of visual inspections are summarized in Section 4.1.3.

Two wells, 652 and 653, had measurable free product at 0.03 and 0.05 feet in thickness, respectively; therefore samples were not collected as planned. Boom 10 is being maintained at the seep on a monthly basis to control the migration of sheen into downstream waters, namely Sweeper Cove. Additionally, periodic free product recovery was performed at wells

652 and 653 during October 2012 through September 2013. No product was recovered from site wells during this time period. The monthly free product recovery activities are summarized in Appendix J. A summary of boom maintenance for this site is presented in the Remedial Action Summary Report, Free Product Recovery, (Navy 2014).

22.2 TARGET ANALYTE RESULTS

Surface water sample 852 and groundwater samples collected from monitoring wells 650, 651, 652 and 653 were analyzed for DRO, BTEX and PAHs. BTEX and PAHs were used to calculate TAH and TAqH for the samples. The groundwater sample collected from well LC5A was analyzed for BTEX and PAHs which were used to calculated TAH and TAqH. The groundwater sample collected from well MW-E006 was analyzed for benzene. Sediment sample 852 was analyzed for DRO and PAHs. Tables 22-2, 22-3 and 22-4 present the groundwater, surface water and sediment analytical results, respectively. Historical analytical results obtained for these locations are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

DRO concentrations for the surface water protection well 650 (2,400 µg /L) exceeded the endpoint criteria of 1,500 µg /L. The remaining surface water protection well sampled for DRO in 2013 (651) was below the endpoint criteria of 1,500 µg/L. All BTEX constituents were detected below their respective endpoint criteria in wells 650, 651 and LC5A except for benzene which was detected above the endpoint criteria in well 650 at a concentration of 7.2 µg/L. TAH and TAqH concentrations exceeded the respective water quality standards of 10 µg/L and15 µg/L in surface water protection well 651 (135 µg/L and 167 µg/L, respectively) and well LC5A (121 µg/L and 196 µg/L, respectively).

Benzene did not exceed the endpoint criteria of 5.0 µg/L in groundwater collected from upland well MW-E006 for the second consecutive sampling event.

DRO (130 µg/L) was detected below the risk-based cleanup level of 250 µg/L in the surface water sample collected at sample location 852. TAH, TAqH and indeno(1,2,3-cd)pyrene also did not exceed endpoint criteria in this sample.

DRO was detected in sediment sample 852 at 2,000 mg/kg, which exceeded the endpoint criteria of 90.6 mg/kg. Phenanthrene and 2-methylnaphthalene did not exceed the endpoint criteria of 0.0202 mg/kg and 0.225 mg/kg, respectively.

Table 22-2. Analytical Results for Petroleum-Related Chemicals for Groundwater at SWMU 60, Tank Farm A

Well Location	Year	DRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)
650 Downgradient	2011	1,100 Y	4.6	0.28 J	0.29 J	1.09 J	6.3 J	8.7 JX
	2012	**1,600 Y**	**10**	0.70 U	0.25 J	0.61 J	**10.9 J**	12 JX
	2013	**2,400 Y**	**7.2**	0.50 U	0.080 J	0.11 J	7.4 J	8.7
651 Downgradient	2011	1,200 Y	2.7	1.2	24	79	**107**	**137 D**
	2012	1,300 Y	2.9	1.7	22	67	**93**	**127 D**
	2013	1,300 Y	3.3	1.6	33	97	**135**	**167 D**
652 Plume Source Area	2011	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
	2012	**4,000 Y**	4.9	1.4	32 J	52 J	**90 J**	**127 JD**
	2013	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
653 Plume Source Area	2011	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
	2012	**1,900 Y**	0.50 U	0.50 U	1.2	6.2 J	**7.4 J**	10.3 J
	2013	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
LC5A Downgradient	2002	1,100	NP	NP	NP	NP	NP	NP
	2003	**1,800**	1.6 J	1.8 J	24 J	70 J	NP	NP
	2004	**2,170**	NP	NP	NP	NP	NP	NP
	2005	1,500 J	NP	NP	NP	NP	NP	NP
	2006	**3,000**	NP	NP	NP	NP	NP	NP
	2007	1,500 Y	NP	NP	NP	NP	NP	NP
	2008	1,100	1.6 J	2.6 J	21 D	48 DJ	**73**	**123**
	2009	1,000 Y	1.3	1.7	26	59	**88**	**123 DJ**
	2010	860 Y	1.1	2.3	26	47	**77**	**115 DJ**
	2011	1,200 Y	1.6	2.3	32	54	**90**	**132 DJ**
	2012	NP	1.4 J	3.0 J	22 J	29 J	**56 J**	**106 DJ**
	2013	NP	2.0	3.9	55	60	**121**	**196 DJ**
MW-E006 Plume Source Area	2002	532 U	NP	NP	NP	NP	NP	NP
	2003	710	**19**	2 U	2 U	4 U	NP	NP
	2004	NP	**10.5**	0.5 U	0.5 U	1 U	NP	NP
	2005	NP	**7.82**	0.19 J	0.73	2.38	NP	NP
	2006	NP	**15**	1.0 U	1.0 U	3.0 U	NP	NP
	2007	NP	4.8	0.50 U	0.50 U	1.0 U	NP	NP
	2008	NP	**16**	0.50 U	0.50 U	1.0 U	NP	NP
	2009	NP	**9.9**	0.50 U	0.10 J	0.62 J	NP	NP
	2010	NP	**8.1**	NP	NP	NP	NP	NP
	2011	NP	**7.4**	NP	NP	NP	NP	NP
	2012	NP	4.7	NP	NP	NP	NP	NP
	2013	NP	3.8	NP	NP	NP	NP	NP
Endpoint Criteria		1,500	5	1,000	700	10,000	10[3]	15[3]

Notes:

[1] TAH results were calculating by summing the detected concentrations of BTEX when one or more were detected and by summing the quantitation limits when none were detected.

[2] TAqH results were calculated by summing the detections of BTEX and 16 PAHs when one or more were detected and by summing the quantitation limits when none were detected.

[3] TAH and TAqH endpoint criteria are based on the ADEC water quality standard as specified in 18 AAC 70.

Bold indicates reported concentration is greater than the endpoint criteria based on ADEC cleanup levels for groundwater used as a drinking water source.

Table 22-3. Analytical Results for Petroleum-Related Chemicals in Surface Water at SWMU 60, Tank Farm A

Location	Year	DRO (µg/L)	Indeno(1,2,3-cd)pyrene (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)
852 Downgradient	2006	**900**	0.10 U	6.0 U	0.45 J
	2007	93 Z	0.020 U	1.3 J	1.4 J
	2008	84 J	0.0017 J	0.070 J	0.26 J
	2009	**1,000 Y**	0.020 U	2.6 J	6.7 J
	2010	**580 Y**	0.020 U	1.1 J	4.9 J
	2011	**1,200 Y**	0.020 U	1.2 J	4.7 J
	2012	130	0.020 U	2.5 U	0.07 J
	2013	63 Y	0.0097 J	2.5 U	0.37 JX
Endpoint Criteria		250	0.28	10[3]	15[3]

Notes:
[1] TAH results were calculated by summing the detected concentrations of BTEX when one or more were detected and by summing the quantitation limits when none were detected.
[2] TAqH results were calculated by summing the detections of BTEX and 16 PAHs when one or more were detected and by summing the quantitation limits when none were detected.
[3] The TAH and TAqH endpoint criteria are based on ADEC water quality standards as specified in 18 AAC 70.
Bold indicates reported concentration is greater than endpoint criteria.

Table 22-4. Analytical Results for Sediment at SWMU 60, Tank Farm A

Location	Year	DRO (mg/kg)	2-Methylnaphthalene (mg/kg)	Phenanthrene (mg/kg)
852 Downgradient	2006	**260 J**	0.0068 J	0.031
	2007	**1,300 DY**	0.014	**0.600**
	2008	**500 YJ**	0.0055 U	0.081 J
	2009	**2,900 Y**	0.020	0.120 U
	2010	**4,100 DY**	**0.190**	0.160
	2011	**1,400 DY**	**0.041**	0.130
	2012	**10,000 DY**	0.013 JD	**0.470 U[1]**
	2013	**2,000 Y**	0.0064	0.022 U
Endpoint Criteria		90.6	0.0202	0.225

Notes:
[1] Quantitation limit is elevated due to matrix interference. (The method detection limit is elevated to the same value due to the interference.)
Bold indicates reported concentration is greater than the endpoint criteria.

22.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that biodegradation of petroleum hydrocarbons is occurring by iron (II) reduction; sulfate reduction; and strong evidence of methanogenesis as shown by elevated ferric iron concentrations, depleted sulfates and elevated methane concentrations in comparison to background conditions. Groundwater parameters presented in Table 22-1 collected during the 2013 LTM event supports evidence of continued natural attenuation as shown by the

reducing environment (negative ORP) and depleted dissolved oxygen (0.0 mg/L) at the site. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

22.4 TREND EVALUATION

Statistical trend evaluations are only conducted for target analyte concentrations in groundwater for analytes that exceeded endpoint criteria within the last two sampling events, in accordance with the CMP, Revision 5 (Navy 2012a). Additionally, a minimum of four data points are required for the analysis. Therefore no trend evaluation was conducted for this site in 2013.

22.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring conducted at the SWMU 60, Tank Farm A site in 2013. The conclusions are as follows:

- Groundwater Flow: The groundwater flow direction in the upland area appears to follow site topography and flow directly southeast toward South Sweeper Creek in the lowland area.
- MNA: The groundwater parameters obtained during the 2013 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Free product was observed in well 652 at thicknesses of 0.03 feet and well 653 at a thickness of 0.05 feet. No free product was removed from the site during October 2012 through September 2013.
- Well 650: This well is located within the contaminant plume. The DRO and benzene concentrations were observed at concentrations of 2,400 µg/L and 7.2 µg/L, respectively, which were above endpoint criteria. Toluene, ethylbenzene, total xylenes, TAH and TAqH concentrations were below endpoint criteria.
- Well 651: This well is located within the contaminant plume. The DRO and BTEX concentrations were observed at concentrations below endpoint criteria. TAH and TAqH concentrations in groundwater exceeded ADEC water quality standards at 135 µg/L and 167 µg/L, respectively.
- Wells 652 and 653: Planned sampling at these two wells which are located within the contaminant plume was not conducted due to the presence of free product that was greater than or equal to 0.02 feet in thickness.

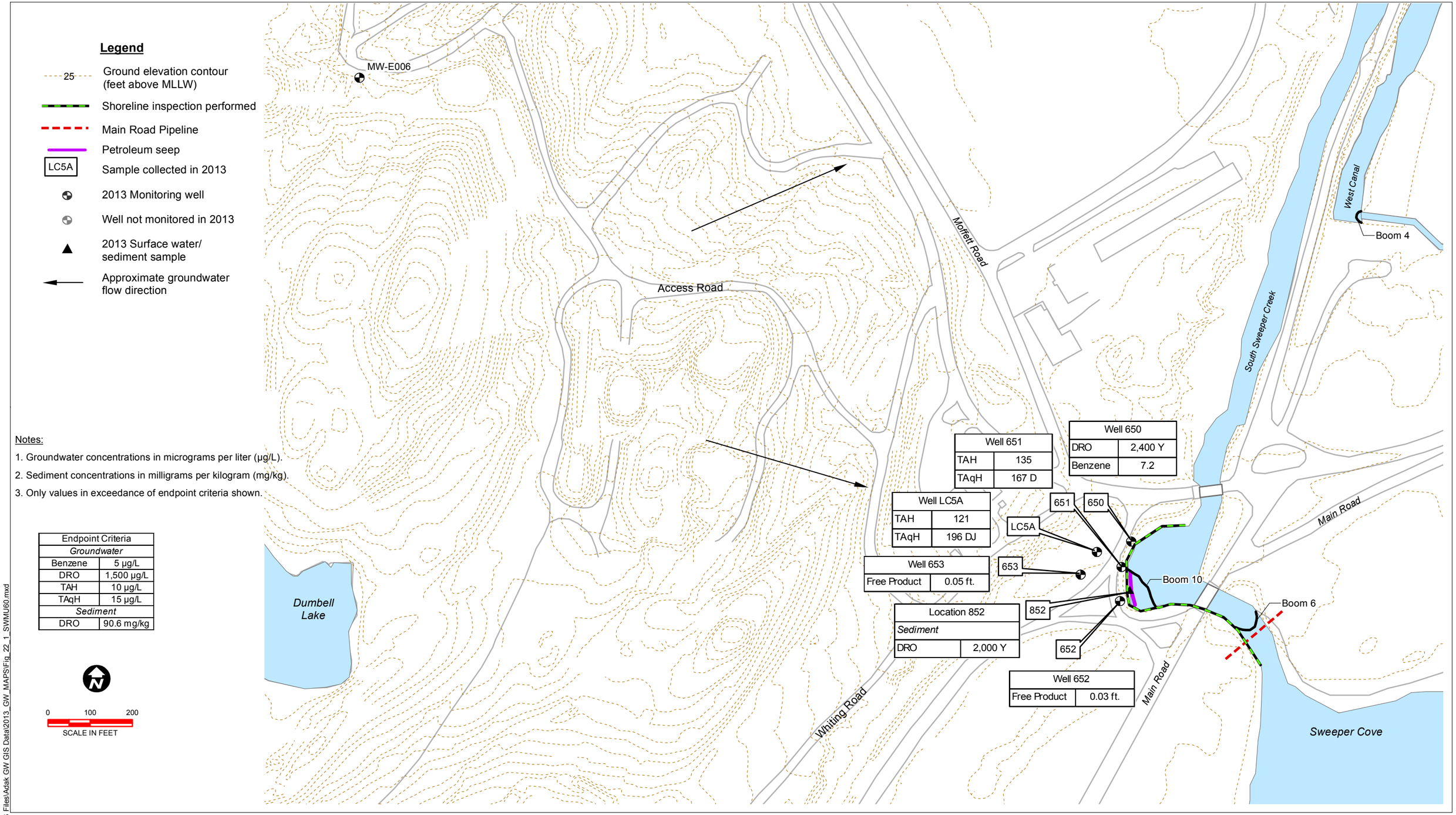
- Well LC5A: BTEX concentrations were observed below endpoint criteria for the sixth consecutive sampling event in this downgradient well. TAH and TAqH concentrations in groundwater exceeded ADEC water quality standards at 121 µg/L and 196 µg/L, respectively.
- Well MW-E006: The benzene concentration was observed below the endpoint criteria in 2013 for the second consecutive field event at a concentration of 3.8 µg/L.
- Sample location 852: Surface water and sediment were collected at the observed petroleum seep in South Sweeper Creek downgradient of the site. No contaminant of concern exceeded endpoint criteria in the surface water. DRO exceeded the endpoint criteria in sediment at this location in 2013 at a concentration of 2,000 µg/L. This is a decrease compared to the 2012 concentration which was 10,000 mg/kg. The increase in DRO concentration in 2012 coincided with the collapse of the adjacent culvert which released a large amount of visible sheen. 2-Methylnaphthalene and phenanthrene have remained below their respective endpoint criteria for at least two consecutive sampling events.
- A petroleum seep is located downgradient of well 652 on the northwestern shoreline of South Sweeper Creek lagoon. Sorbent booms are being maintained monthly at this location to control sheen on surface water from the shoreline petroleum seep. Oily sediments, strong petroleum odor and sheen were observed behind the boom.

22.6 RECOMMENDATIONS

The benzene concentration in upland well MW-E006 has remained below endpoint criteria for two consecutive sampling events; therefore, it is recommended that monitoring at this location be discontinued.

DRO, benzene, TAH and TAqH have continued to exceed endpoint criteria in various other site wells. Additionally, free product continues to be observed in lowland wells although at a reduced volume and frequency. Therefore, it is recommended that monitoring at these remaining locations be continued as prescribed.

It is further recommended that surface water sample 852 be collected during an ebbing high tide and within approximately 10 feet from the sediment sample location so that it may be more representative of potential impacts from the petroleum seep.



Notes:

1. Groundwater concentrations in micrograms per liter (µg/L).
2. Sediment concentrations in milligrams per kilogram (mg/kg).
3. Only values in exceedance of endpoint criteria shown.

Endpoint Criteria	
Groundwater	
Benzene	5 µg/L
DRO	1,500 µg/L
TAH	10 µg/L
TAqH	15 µg/L
Sediment	
DRO	90.6 mg/kg

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U.S. NAVY	SEALASKA	**Figure 22-1** **SWMU 60, Tank Farm A** **Sample Locations**	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

23 SWMU 61, TANK FARM B

This section presents the results of groundwater monitoring performed at the SWMU 61, Tank Farm B site during 2013. The remedy specified for this site in the OU A ROD is MNA (Navy, ADEC and EPA 2000). To comply with requirements specified for this remedy, the Navy has conducted periodic groundwater sampling and water level/product thickness monitoring at the site. Groundwater samples have been collected from wells to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345), to verify that natural attenuation is occurring in groundwater, to verify that natural recovery is occurring in surface water and sediment and to monitor for surface water protection.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

23.1 FIELD MEASUREMENTS

The monitoring wells were gauged and sampled on September 6, 2013. Depth-to-water and product thickness measurements were collected at three monitoring wells. Table 23-1 provides the measured depths-to-groundwater and the calculated groundwater elevations. No free product was detected in any of the site wells. Figure 23-1 shows the locations of the wells, analytical results that exceeded endpoint criteria, site topography and features and potential sources of contamination (e.g., fuel lines).

The site is divided into two areas of upper and lower elevations. The upper elevation part of the site is underlain by a relatively thin layer of tephra and glacial till overlying bedrock, while the lower elevation part is underlain by the western edge of a sandy aquifer. Historic groundwater elevation data and the hydrogeological setting of the site indicate that the groundwater flows southeast following site topography in the upland area and directly east toward North Sweeper Creek in the lowland area and riverine wetland. Groundwater elevations collected in 2013 were compared to historical data and support this interpretation.

Table 23-1. 2013 Field Measurements for SWMU 61, Tank Farm B

Physical Measurements					Water Quality Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
Groundwater Samples											
14-113	9.09[1]	3.39	0.05	0	6.53	0.999	8.8	0.00	9.93	0.00	-120
14-210	11.67[1]	2.76	0.45	0	6.09	0.735	8.4	4.41	9.54	0.00	-58
TFB-MW4B	37.44	4.47	32.97	0	6.05	0.272	0.0	0.00	7.22	0.01	-38
Surface Water Samples											
NL-04	NA	NA	NA	NA	6.21	0.119	1	7.89	9.98	0.00	82

Notes:
[1] New casing elevations because well was repaired in 2013.
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

Three wells were sampled on September 6 and 7, 2013. Field measurements were recorded on field data forms and logbooks during monitoring well sampling activities (Appendix A). Table 23-1 lists the final field measurements recorded at each water sampling location prior to sample collection. A review of the sampling data reported for the site indicates that groundwater parameters at well TFB-MW-4B stabilized prior to sample collection. The parameters at wells 14-113 and 14-210 did not stabilize, so three well casing volumes were removed from well 14-113 prior to sampling per CMP, Revision 5 (Navy 2012a). Monitoring well 14-210 was purged dry. Sufficient water for sampling was available after the well was allowed to recharge overnight and the well was then sampled the next day. The 2013 analytical results in these wells are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

On September 6, 2013, surface water and sediment samples (location NL-04) were collected from the western shoreline of North Sweeper Creek downgradient of monitoring well 14-113 (Figure 23-1) to determine whether petroleum contamination from groundwater is impacting surface water. Sample NL-04 was collected immediately downgradient of well 14-113. The laboratory performed an incorrect extraction for GRO on the sediment sample; therefore, this sediment was re-sampled for GRO on October 25, 2013 and submitted for re-analysis. It should be noted that the sediment sample was collected from a swampy wetland and contained high moisture content that resulted in elevated quantitation limits.

An inspection of the western shoreline of North Sweeper Creek was performed in 2013 at site SWMU 61, Tank Farm B between monitoring well 14-113 and the confluence with an unnamed stream approximately 100 feet to the north. No visual evidence of petroleum contamination was observed during the inspection or during sampling at location NL-04; however, a light petroleum odor was observed during the sediment sampling. No surface water exceeded endpoint criteria. No target analytes were detected in the sediment collected at NL-04. Shoreline inspection information is also summarized in Section 4.1.3.

23.2 TARGET ANALYTE RESULTS

The following sections describe the analytical results for the samples collected in 2013. Historical analytical results obtained for these locations are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

23.2.1 Groundwater

The groundwater samples collected from wells 14-113, 14-210 and TFB-MW4B were analyzed for GRO and BTEX. The groundwater sample from surface water protection monitoring well 14-113 was also analyzed for PAHs. TAH and TAqH results for well 14-113 were calculated from the BTEX and PAH results. Groundwater analytical results were compared to the endpoint criteria for groundwater at petroleum-release sites presented in Appendix F or the CMP, Revision 5 (Navy 2012a). Table 23-2 presents the groundwater analytical results.

GRO was detected above the endpoint criteria (2,200 µg/L) in the samples collected from wells 14-113 (2,800 µg/L), 14-210 (3,200 µg/L) and TFB-MW4B (43,000 µg/L). Benzene was detected above the endpoint criteria (5 µg/L) in the samples collected from wells 14-113 and TFB-MW4B at concentrations of 6.9 µg/L and 20 µg/L, respectively. Groundwater collected from well TFB-MW4B also exceeded endpoint criteria with the observed concentrations of toluene (4,000 µg/L), ethylbenzene (1,900 µg/L) and total xylenes (13,900 µg/L). TAH and TAqH were detected above the endpoint criteria (10 µg/L and 15 µg/L, respectively) in the sample collected from surface water protection well 14-113 both at a concentration of 652 µg/L.

Table 23-2. Analytical Results for Petroleum-Related Chemicals for Groundwater Samples at SWMU 61, Tank Farm B

Well Location	Year	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)
14-113 Surface Water Protection Well	2003	**2,000**	**34**	8.2	150	583 J	NP	NP
	2004	**6,880J**	**30.8 J**	21.6	54 J	1,290 J	NP	NP
	2005	**3,900 J**	**22.7 J**	11 J	65.9 J	1,590 J	NP	NP
	2006	**6,300**	**16**	5.7	43	1,700	NP	NP
	2007	**3,900 Z**	**14**	4.4	20	812 D	**850 D**	**850 D**
	2008	**2,700 Z**	**9.6 D**	3.2 D	14 D	722 JD	**748 JD**	**748 JD**
	2009	**5,100 Z**	**13 D**	7.2 D	30 D	1403 D	**1,453 D**	**1,453 DJ**
	2010	**3,800 Y**	**12**	4.5	17	1,202 D	**1,235 D**	**1,236 JD**
	2011	**3,400 Y**	**8.3**	2.8	11	842 D	**864 D**	**865 DJ**
	2012	**2,000 Y**	**6.9 J**	2.8 J	12 J	682 DJ	**704 DJ**	**704 DJ**
	2013	**2,800 Z**	**6.9**	2.0	12	631 D	**652 D**	**652 DJX**
14-210 Downgradient	2001	**5,900**	**17.4**	3.65	2.31	5.33	NP	NP
	2002	**2,300**	4	1.1 J	2 U	3.1 J	NP	NP
	2003	**3,300**	**10 U**	4.1 J	3.5 J	21	NP	NP
	2004	**5,220J**	0.5 U	0.5 U	0.12 J	0.55J	NP	NP
	2005	**3,560**	1 U	1 U	0.24 J	4.94 J	NP	NP
	2006	**3,700 J**	1.0 U	1.0 U	1.0 U	5.8	NP	NP
	2007	**3,400 Y**	1.0 U	0.26 JD	1.0 U	0.50 JD	NP	NP
	2008	**3,800 Y**	0.50 U	1.4 UJ	0.50 U	1.04 J	NP	NP
	2009	**4,500 Y**	0.50 U	0.50 U	0.070 J	0.35 J	NP	NP
	2010	**4,200 Y**	0.50 U	0.66	0.14 J	0.90 J	NP	NP
	2011	**1,600 Y**	0.50 U	0.13 J	0.12 J	0.60 J	NP	NP
	2012	**2,400 Y**	0.080 J	0.50 UJ	0.10 J	0.56 J	NP	NP
	2013	**3,200 Z**	0.50 U	0.10 J	0.060 J	0.40 J	NP	NP

Table 23-3. Analytical Results for Petroleum-Related Chemicals for Groundwater Samples at SWMU 61, Tank Farm B (continued)

Well Location	Year	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)
TFB-MW4B Plume Source Area	2001	**36,500**	**54**	**3,270**	**1,100**	7,850	NP	NP
	2002	**29,000**	**50 J**	**3,000**	**990**	7,600	NP	NP
	2003	**30,000**	**73 J**	**5,600**	**2,200**	**13,456**	NP	NP
	2004	**50,600 J**	**69 J**	**6,110 J**	**1,660 J**	**12,100 J**	NP	NP
	2005	**46,700 J**	**49.5 J**	**4,580 J**	**1,750 J**	**12,500 J**	NP	NP
	2006	**40,000 J**	**31**	**3,500**	**1,400**	**10,800**	NP	NP
	2007	**41,000 DY**	**39 D**	**4,100 D**	**1,700 D**	**12,800 D**	NP	NP
	2008	**53,000 DY**	**29 D**	**4,400 D**	**1,600 D**	**12,600 D**	NP	NP
	2009	**50,000 DY**	**31 D**	**4,800 D**	**2,000 D**	**14,900 D**	NP	NP
	2010	**46,000 DY**	**30 D**	**4,600 D**	**2,100 D**	**15,700 D**	NP	NP
	2011	**51,000 DY**	**23 D**	**4,100 D**	**1,900 D**	**15,300 D**	NP	NP
	2012	**36,000 DY**	**24 D**	**4,800 DJ**	**2,100 D**	**15,600 D**	NP	NP
	2013	**43,000 DZ**	**20 D**	**4,000 D**	**1,900 D**	**13,900 D**	NP	NP
Endpoint Criteria		2,200	5	1,000	700	10,000	10[3]	15[3]

Notes:
[1] TAH results were calculating by summing the detected concentrations of BTEX when one or more were detected and by summing the quantitation limits when none were detected.
[2] TAqH results were calculated by summing the detections of BTEX and 16 PAHs when one or more were detected and by summing the quantitation limits when none were detected.
[3] TAH and TAqH endpoint criteria are based on the ADEC water quality standard as specified in 18 AAC 70.
Bold indicates reported concentration is greater than the endpoint criteria or water quality standard.

23.2.2 Surface Water

The surface water sample collected at location NL-04 was analyzed for GRO, BTEX and PAHs (for calculation of TAH and TAqH). Surface water analytical results were compared to CMP, Revision 5 (Navy 2012a) South Sweeper Creek endpoint criteria and State of Alaska surface water criteria. Table 23-3 presents the surface water analytical results.

GRO, TAH and TAqH were not detected above surface water endpoint criteria or water quality standards (114 µg/L, 10 µg/L and 15 µg/L, respectively) at the surface water sample location.

Table 23-3. Analytical Results for Petroleum-Related Chemicals in Surface Water at SWMU 61, Tank Farm B

Location	Year	GRO (µg/L)	Total Aromatic Hydrocarbons[1] (µg/L)	Total Aqueous Hydrocarbons[2] (µg/L)
NL-04	2007	100 U	0.36 J	0.36 J
	2008	100 U	0.23 J	0.23 J
	2009	100 U	2.5 U	0.048
	2010	16 J	0.35 J	0.35 J
	2011	100 U	0.59 J	0.60 J
	2012	100 U	1.2 J	1.2 J
	2013	100 U	0.17 J	0.17 J
Endpoint Criteria[3,4]		114	10	15

Notes:
[1] TAH results were calculating by summing the detected concentrations of BTEX when one or more were detected and by summing the quantitation limits when none were detected.
[2] TAqH were calculated by summing the detections of BTEX and 16 PAHs when one or more were detected and by summing the quantitation limits when none were detected.
[3] TAH and TAqH endpoint criteria are based on the ADEC water quality standard as specified in 18 AAC 70.
[4] Endpoint criteria for North Sweeper Creek have not been established so endpoints for South Sweeper Creek were used.

23.2.3 Sediment

Sediment sample NL-04 was analyzed for GRO and BTEX. Sediment analytical results were compared to CMP, Revision 5 (Navy 2012a) South Sweeper Creek endpoint criteria. Table 23-4 presents the sediment analytical results. GRO and BTEX were not detected in the sediment sample; however, the GRO method detection limit for this sample exceeded the 12.2 mg/kg endpoint criteria due to a high water content in the sample.

Table 23-4. Analytical Results for Petroleum-Related Chemicals in Sediment Samples at SWMU 61, Tank Farm B

Location	Year	GRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)
NL-04	2007	2.8 UJ	0.012 U	0.012 U	0.012 U	0.035 U
	2008	**300 ZJ**	0.058 J	0.24 U	0.27	26 J
	2009	**13 J**	0.066 U	0.066 U	0.066 U	0.062 J
	2010	**60 J[1]**	0.70 U	0.70 U	0.70 U	1.4 U
	2011	**16 U[2,3]**	0.50 U	0.50 U	0.50 U	1.0 U
	2012	**20 U[2,3]**	0.67 UJ	0.67 UJ	0.67 UJ	1.3 UJ
	2013	**16 U[2,3]**	0.54 U	0.54 U	0.54 U	1.1 U
Endpoint Criteria[4]		12.2	None	None	None	None

Notes:
[1]Value is reported from the field duplicate sample because the sample result was a non-detect with a quantitation limit greater than the endpoint criteria.
[2] Value is the method detection limit because the quantitation limit is greater than the risk-based endpoint criteria.
[3] Method detection limit is elevated due to high moisture in the sample.
[4] Endpoint criteria for North Sweeper Creek have not been established so endpoints for South Sweeper Creek were used.
Bold indicates reported concentration is greater than the endpoint criteria.

23.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that biodegradation of petroleum hydrocarbons is occurring by iron (II) reduction; sulfate reduction; and methanogenesis as shown by elevated ferric iron concentrations, depleted sulfates and elevated methane concentrations in comparison to background conditions. A large, riverine wetland is located along the shoreline of North Sweeper Creek and fills the flat bed of the stream valley below the site. Wetland methanogenesis, which is caused by the microbiological degradation of naturally occurring organic matter in saturated surface soils, occurs here resulting in a geochemical signature that may be indistinguishable from petroleum hydrocarbon degradation. Wetland methanogenesis is suspected to occur at the low-lying sample locations (wells 14-113 and 14-210) and surface water/sediment locations (NL-04 and NL-D-04).

The groundwater parameters presented in Table 23-1, which were collected during the 2013 LTM event, support evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and low dissolved oxygen concentrations (0.0 mg/L) in the upland onsite source area well TFB-MW4B, which is outside the wetland.

It should be noted that wetland methanogenesis will not prevent petroleum degradation from occurring, but may obscure the ability to monitor its occurrence. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

23.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a). Trend evaluation is conducted only for analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. Results of the Mann-Kendall and Sen's trend evaluations are summarized in Table 23-5. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well 14-113:
    - GRO exhibits a decreasing trend at both the 80 percent and 95 percent confidence intervals. The Sen's evaluation for GRO did not show a statistically significant decreasing trend.

- Benzene exhibits a decreasing trend at both the 80 and 95 percent confidence intervals with a Sen's evaluation indicating a statistically significant decreasing trend with a median slope of -2.4.

- Well 14-210: GRO exhibits a decreasing trend at the 80 percent confidence interval. The Sen's evaluation for GRO did not show a statistically significant decreasing trend.
- Well TFB-MW4B:
  - GRO exhibits no trend at both the 80 or 95 percent confidence intervals and a stable concentration.
  - The benzene concentration exhibits a decreasing trend at both the 80 and 95 percent confidence intervals. Sen's evaluation also indicates a statistically significant decreasing trend, with a median slope of -2.88.
  - The toluene concentration exhibits no trend at either the 80 or 95 percent confidence intervals. The coefficient of variation indicates the concentration is stable.
  - The ethylbenzene and total xylenes concentrations exhibit increasing trends at both the 80 and 95 percent confidence intervals.

23.5 CONCLUSIONS

This section presents the conclusions based on a review of monitoring performed at the SWMU 61, Tank Farm B site in 2013. The conclusions are as follows:

- Groundwater Flow: The approximate groundwater flow direction is to the southeast in the upland area and appears to follow the site topography. Groundwater flows directly east toward North Sweeper Creek in the lowland area.
- MNA: The groundwater parameters obtained during the 2013 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Product was not observed in any well at the site in 2013.

Table 23-5. Concentration Trend Evaluation for SWMU 61, Tank Farm B

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Two Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
14-113	GRO	Yes	2,800 Y	2,200	10	-28	Decreasing	Decreasing	NA	-290	No	-497	0
	Benzene	Yes	6.9	5	10	-40	Decreasing	Decreasing	NA	-2.4	Yes	-3.2	-1.53
14-210	GRO	Yes	3,200 Z	2,200	10	-15	Decreasing	No trend	NA	-110	No	-227	81.8
TFB-MW4B	GRO	Yes	43,000 DZ	2,200	10	-7	No trend	No trend	Stable	NC	NC	NC	NC
	Benzene	Yes	24 D	5	10	-36	Decreasing	Decreasing	NA	-2.88	Yes	-3.9	-2
	Toluene	Yes	4,800 DJ	1,000	10	-5	No trend	No trend	Stable	NC	NC	NC	NC
	Ethylbenzene	Yes	2,100 D	700	10	21	Increasing	Increasing	NA	NC	NC	NC	NC
	Total Xylenes	Yes	15,600 D	10,000	10	27	Increasing	Increasing	NA	NC	NC	NC	NC

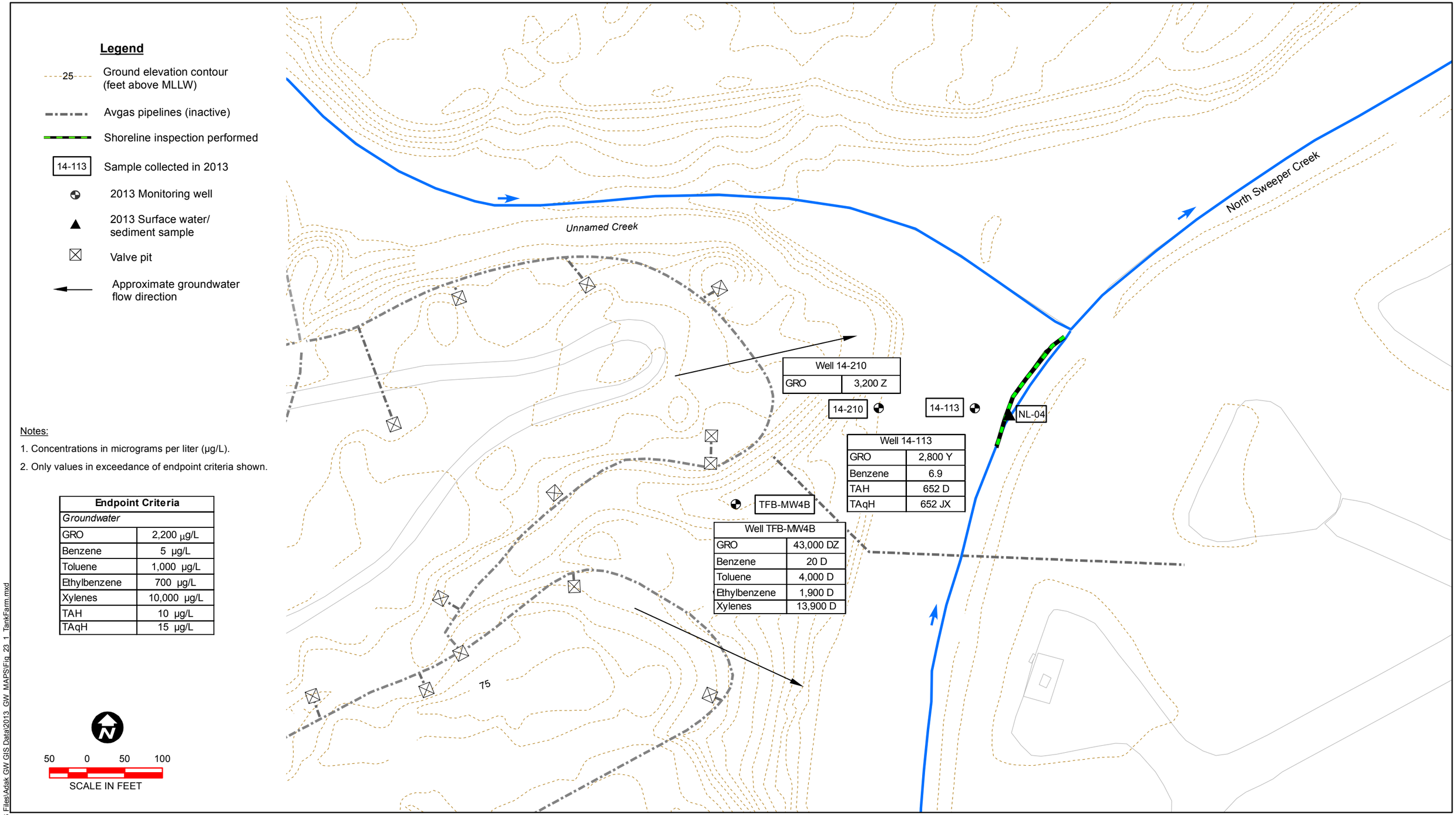
Notes:
[1] Endpoint criteria are established from risk-based cleanup levels.
[2] Concentration Stability determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.

- Well 14-113: GRO and benzene have been detected above the endpoint criteria since 2003. The GRO concentration exhibited a statistically significant decreasing trend for the first time in 2012, and continues to show a decreasing trend in 2013. Benzene also exhibits a statistically significant decreasing trend at both the 80 and 95 percent confidence intervals. The Sen's analyses for both GRO and benzene also indicate statistically significant decreasing trends. TAH and TAqH have both exceeded endpoint criteria since sampling began in 2007. Toluene, ethylbenzene and total xylenes have remained below endpoint criteria since 2003. This well, which represents downgradient conditions, is located within the wetland and adjacent to North Sweeper Creek.
- Well 14-210: GRO has been detected above the endpoint criteria since 2001 and exhibits a decreasing trend at the 80 percent confidence level, however the decreasing trend from the Sen's evaluation was not statistically significant. BTEX has remained below endpoint criteria since 2002. This well is located at the base of the hill between the plume source area and North Sweeper Creek, and it is located within the riverine wetland.
- Well TFB-MW4B: GRO and BTEX have been detected above the ADEC endpoint criteria since 2001 (with the exception of total xylenes, which were below the endpoint criteria in 2001 and 2002). Based on the results of statistical analysis, the benzene concentration is decreasing, with statistical significance at the 95 percent level of confidence. Ethylbenzene and total xylenes concentrations show increasing concentration trends. GRO and toluene concentrations are stable.
- Sample location NL-04: Surface water and sediment samples were collected immediately downgradient of well 14-113 in North Sweeper Creek. Surface water has not exceeded the endpoint criteria since sampling began in 2007. GRO was not detected in sediment, but the method detection limit exceeded the endpoint criteria due to high water content in the sample. Light petroleum odor but no sheen was observed when sediment was collected.
- A shoreline inspection of North Sweeper Creek revealed no observed petroleum contamination.

23.6 RECOMMENDATIONS

GRO, BTEX, TAH and TAqH concentrations in groundwater collected from monitored wells at this site remain above their respective endpoint criteria. Concentrations of

ethylbenzene and total xylenes show increasing trends in well TFB-MW4B but are not statistically significant. However, evidence that natural attenuation is progressing is evidenced by the decreasing concentration trends of GRO and benzene in site wells. Because of this, it is recommended that all monitoring at this site continue as prescribe to allow time for the remedy of MNA to be effective.



Notes:

1. Concentrations in micrograms per liter (µg/L).
2. Only values in exceedance of endpoint criteria shown.

Endpoint Criteria	
Groundwater	
GRO	2,200 µg/L
Benzene	5 µg/L
Toluene	1,000 µg/L
Ethylbenzene	700 µg/L
Xylenes	10,000 µg/L
TAH	10 µg/L
TAqH	15 µg/L

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Date Modified: 02/18/13 MI

U.S. NAVY	SEALASKA	Figure 23-1 SWMU 61, Tank Farm B Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

24 SWMU 62, NEW HOUSING FUEL LEAK

This section presents the results of groundwater monitoring performed at the SWMU 62, New Housing Fuel Leak site during September 2013. The remedy specified for this site in the OU A ROD is free product recovery (Navy, ADEC and EPA 2000). Additional post free product recovery and MNA remedy are specified in the Final Decision Document for SWMU 62, New Housing Fuel Leak (Navy 2006e). To comply with requirements specified for this remedy, the Navy has conducted annual groundwater sampling and water level/product thickness monitoring at the site. Groundwater samples are collected from wells at the site to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345), to determine whether natural attenuation is occurring and to monitor for surface water protection.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

24.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at 32 monitoring wells at Sandy Cove on September 10, 2013 and at Eagle Bay on September 7, 2013. Thirteen of the wells are located in the Sandy Cove Housing 102, 107 and 146 Areas, and nineteen wells are located in the Eagle Bay Housing Complex. Table 24-1 provides the measured depths-to-water (corrected for product thickness, if present), the calculated groundwater elevations and the product thicknesses if present. Groundwater elevations have been corrected for the presence of free product in the wells with detectable thicknesses (Appendix D-1). Figures 24-1 and 24-2 show the locations of the wells in Sandy Cove and Eagle Bay Housing, respectively, relative to the site features, the site topography and the interpreted groundwater flow directions.

The historic water level data indicate that the direction of groundwater flow in the main aquifer beneath the site is to the west-southwest beneath Sandy Cove and to the west-northwest toward East Canal beneath Eagle Bay. Groundwater elevations collected in 2013 were compared with historical data and is consistent with this interpretation.

Table 24-1. 2013 Field Measurements for SWMU 62, New Housing Fuel Leak

	Physical Measurements				Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
Groundwater											
Sandy Cove Housing 102, 107 and 146 Areas											
03-104	25.13	19.80	5.33	0	5.77	0.255	0.0	0.00	7.55	0.01	-9
03-155	26.27	19.31	6.96	0	5.99	0.505	48.6	0.00	6.66	0.00	-14
03-619	23.38[3]	16.65	6.73	0	5.73	0.280	0.0	0.00	7.15	0.01	173
03-778	25.30	19.85	5.45	0	6.21	0.273	0.0	0.00	6.91	0.01	-83
HMW-146-1	23.52	17.04	6.48	0	NP	NP	NP	NP	NP	NP	NP
MRP-MW2[1]	26.99	21.69	5.30	0	6.24	0.275	2	0.00	9.40	0.00	-24
MRP-MW3	27.25	8.29	18.96	0	5.98	0.244	0.0	0.00	8.83	0.01	-56
MW-107-1	25.65	18.60	7.05	0	5.95	0.221	0.0	0.00	6.54	0.01	-38
MW-134-10	23.94[3]	17.18	6.76	0	NP	NP	NP	NP	NP	NP	NP
MW-134-11	26.53	18.49	8.04	0	6.05	0.510	0.0	0.00	7.52	0.02	-61
MW-146-1	24.42	17.52	6.90	0	5.61	0.272	0.0	0.00	8.11	0.01	-1
MW-187-1	26.86	19.42	7.44	0	6.07	0.870	43.7	0.00	6.61	0.00	-53
RW-102-4	25.28	19.51	5.77	0	NP	NP	NP	NP	NP	NP	NP
Eagle Bay Housing Complex											
03-101	26.01	22.43	3.58	0	NP	NP	NP	NP	NP	NP	NP
03-102	17.27	13.99	3.28	0	NP	NP	NP	NP	NP	NP	NP
03-103	18.93	15.78	3.15	0	NP	NP	NP	NP	NP	NP	NP
03-109	33.69	30.03	3.66	0	NP	NP	NP	NP	NP	NP	NP
03-502	28.04	24.40	3.64	0	5.80	0.151	2.2	0.00	10.99	0.01	-7
03-898	14.83	12.46	2.37	0	NP	NP	NP	NP	NP	NP	NP
AMW-704	8.21	6.51	1.70	0	5.53	0.136	0.0	0.00	8.54	0.00	87
CTO-124-MW15	20.96	17.60	3.36	0	NP	NP	NP	NP	NP	NP	NP
HMW-303-3	31.64	27.82	3.82	0	NP	NP	NP	NP	NP	NP	NP
HMW-303-4	30.20	26.17	4.03	0	NP	NP	NP	NP	NP	NP	NP
HMW-303-11	30.35	26.60	3.75	0	NP	NP	NP	NP	NP	NP	NP
MW-303-7	26.07[3]	21.80	4.27	0	5.80	0.301	1.5	0.00	8.60	0.01	-54

Table 24-1. 2013 Field Measurements for SWMU-62, New Housing Fuel Leak (continued)

	Physical Measurements				Groundwater Parameters						
Well Location	**Casing Elevation**	**Depth-to-Water**	**Groundwater Surface Elevation**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
Eagle Bay Housing Complex (continued)											
Groundwater											
MW-303-8	27.20[3]	22.93[2]	4.27	0.08	NP	NP	NP	NP	NP	NP	NP
MW-303-12	25.64[3]	21.54	4.10	0	NP	NP	NP	NP	NP	NP	NP
RW-303-4	26.31	22.26[2]	5.63	0.03	NP	NP	NP	NP	NP	NP	NP
RW-303-13	8.98	6.44	2.54	0	5.64	0.113	0.0	2.68	9.30	0.01	108
RW-303-14	10.53	7.73	2.80	0	NP	NP	NP	NP	NP	NP	NP
RW-303-15	31.26	27.55	3.71	0	NP	NP	NP	NP	NP	NP	NP
RW-303-16	11.02	7.79	3.23	0	5.85	0.222	0.0	0.00	8.57	0.01	-39
Surface Water											
NL-09	NA	NA	NA	NA	6.54	0.622	49	8.01	9.22	0.0	89

Notes:
[1] Also sampled as part of Area 303.
[2]Corrected for presence of product in the well.
[3] New casing elevation because the well was repaired in 2013
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

Well MRP-MW3 is located in a localized shallow perched aquifer within the western DRO and GRO plume.

Fifteen wells were sampled for petroleum contaminants between September 9 and 11, 2013. Surface water protection monitoring was performed at five well locations in Eagle Bay: 03-898, AMW-704, RW-303-13, RW-303-14 and RW-303-16. To assess the effectiveness of the sorbent booms maintained in East Canal, one surface water sample (NL-09) was collected in East Canal on September 15, 2013 downgradient of the free product recovery trench and booms. Sediment could not be collected at this location because water levels in East Canal were elevated above the sample location due to malfunctioning canal pumps. Field measurements were recorded on the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 24-1 lists the final field measurements recorded at each monitoring well prior to sample collection.

A review of the sampling data reported for the site indicates that parameters from five wells (03-155, 03-502, 03-802, MW-146-1 and MW-187-1) did not stabilize and were sampled after three well volumes were removed. The 2013 analytical results in these wells are generally consistent with past analytical results and appear to be unaffected by the lack of stabilization.

Free product was detected in two wells MW-303-8 and RW-303-4 at 0.08 feet and 0.03 feet, respectively. Periodic free product recovery activities were performed in the Eagle Bay Housing area at this site during October 2012 through September 2013. A total of 12.64 gallons of free product was recovered from the site during this time frame. Additionally, sorbent booms (booms 2, 3 and 8) are being maintained monthly in East Canal at the petroleum shoreline seep located immediately downgradient of the site's product recovery trench. Periodic free product recovery activities for this site are summarized in Appendix J and the Remedial Action Summary Report, Free Product Recovery (Navy 2014).

A visual inspection of the East Canal shoreline was conducted to identify potential petroleum migration from groundwater to East Canal. The eastern shoreline of East Canal was inspected from the SWMU 62, New Housing Fuel Leak Area product recovery trench to the culvert at boom location 9/12 downgradient from the Former Power Plant, Building T-1451 site. A large petroleum seep, approximately 120 feet in length, is located along the eastern canal shoreline immediately downgradient of the free product recovery trench. Oily sediments, pooled free product, surface water sheen, petroleum odor, stressed vegetation and iron staining were observed at this location. This area is typically dry but was inundated

during the 2013 inspection due to the elevated water levels in East Canal which caused the observation of a seep/sheen here. Sheen and moderate petroleum odor was observed during the collection of surface water sample NL-09. Elevated water levels in East Canal were causing the upgradient booms to be less effective in controlling the migration of sheen. Results of the visual shoreline inspections are summarized in Section 4.1.3.

24.2 TARGET ANALYTE RESULTS

All 10 groundwater samples collected from Sandy Cove wells were analyzed for DRO. Two of these samples, MRP-MW2 and MRP-MW3, were also analyzed for GRO and BTEX. MRP-MW2 was also sampled as part of Area 303. Four groundwater samples collected from Eagle Bay wells were analyzed for DRO. One groundwater sample from well 03-502 was analyzed for GRO. Tables 24-2 and 24-3 present the analytical results for groundwater samples collected from Sandy Cove and Eagle Bay Housing Areas, respectively. Figures 24-1 and 24-2 show the locations of the wells sampled and the analytical results that exceeded endpoint criteria for the Sandy Cove and Eagle Bay Housing Areas, respectively. Historical analytical results obtained for these locations are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

24.2.1 Sandy Cove Housing

Eight of the 10 wells sampled (03-104, 03-155, 03-778, MRP-MW3, MW-107-1, MW-134-11, MW-146-1 and MW-187-1) had detections of DRO above the endpoint criteria (1,500 µg/L) at concentrations ranging from 1,700 µg/L (plume edge well 03-778) to 9,000 µg/L (plume well MW-146-1).

GRO was detected above the endpoint criteria (2,200 µg/L) in two Sandy Cove Housing wells (MRP-MW2 and MRP-MW3) at concentrations of 5,900 µg/L and 60,000 µg/L, respectively. Benzene was detected above the endpoint criteria (5 µg/L) in one well, MRP-MW2, at a concentration of 94 µg/L. Toluene did not exceed the endpoint criteria (1,000 µg/L) at any of the wells sampled. Ethylbenzene and total xylenes were detected above their respective endpoint criteria of 700 µg/L and 10,000 µg/L in well MRP-MW3 at concentrations of 2,200 µg/L and 12,600 µg/L, respectively. Wells MRP-MW2 and MRP-MW3 are also located within Area 303.

Table 24-2. Analytical Results for Petroleum-Related Chemicals at SWMU 62, New Housing Fuel Leak – Sandy Cove Housing

Well Location	Year	DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
03-104	2006	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
Plume Area	2007	**9,000 Y**	200 H	0.50 U	0.73	2.4	16.9
	2008	**4,800 Y**	340 H	0.50 U	1.9 U	5.6	48
	2009	**5,200 Y**	240 Y	0.050 J	1.2	3.7	36.6
	2010	**5,600 Y**	190 H	0.50 U	0.83	5.2	31.3
	2011	**9,600 Y**	270 H	0.50 U	0.94	4.3	38
	2012	**4,900 Y**	200 H	0.50 U	0.82 U	4.0	38
	2013	**5,500 Y**	NP	NP	NP	NP	NP
03-155	2003	750	43 J	2 U	2 U	2 U	4 U
Plume Area	2004	**1,660**	61.5 UJ	0.5 U	0.5 U	0.5 U	1 U
	2005	**2,070**	22 J	0.5 U	0.5 U	0.5 U	1 U
	2006	1,500	31	1.0 U	1.0 U	1.0 U	3.0 U
	2007	**2,400 Y**	37 J	0.50 U	0.14 J	0.50 U	1.0 U
	2008	**3,300 Y**	33 J	0.50 U	0.50 U	0.50 U	0.10 J
	2009	**1,600 Y**	29 J	0.040 J	0.50 U	0.50 U	1.0 U
	2010	**2,500 Y**	22 J	0.50 U	0.67 U	0.50 U	1.0 U
	2011	**3,100 Y**	40 J	0.50 U	0.50 U	0.50 U	0.11 J
	2012	**2,500 Y**	NP	NP	NP	NP	NP
	2013	**4,400 DY**	NP	NP	NP	NP	NP
03-619	2007	510 Y	57 J	0.50 U	0.13 J	0.50 U	1.0 U
Downgradient	2008	590 Y	37 J	0.20 J	0.57 U	0.50 U	1.0 U
	2009	510 Y	23 J	0.070 J	0.50 U	0.50 U	0.11 J
	2010	660 Y	30 J	0.10 J	0.50 U	0.50 U	0.15 J
	2011	540 Y	21 J	0.50 U	0.50 U	0.050 J	0.12 J
	2012	430 Y	NP	NP	NP	NP	NP
	2013	360 Y	NP	NP	NP	NP	NP
03-778	2006	**1,800**	150	1.0 U	1.0 U	12	7.48 J
Upgradient Plume Edge	2007	**2,100 Y**	160 H	0.50 U	0.73	13	8.5
	2008	1,500 Y	170 H	0.090 J	0.77 U	13	8.22
	2009	860 Y	130 Y	0.50 U	0.68	9.2	6.8
	2010	**2,400 Y**	170 H	0.11 J	0.97	9.5	10.7
	2011	1,500 Y	170 H	0.090 J	0.50 U	9.5	11.7
	2012	**1,600 Y**	120 HJ	0.080 J	0.95	9.1	13.1
	2013	**1,700 Y**	NP	NP	NP	NP	NP
MRP-MW2	2006	840	**3,100**	**39**	1.8	94	730
Plume Area	2007	770 Z	**8,400 DY**	**67 D**	3.7 D	320 D	1501 D
	2008	NP	NP	NP	NP	NP	NP
	2009	650 Y	**4,700 Z**	**75 D**	4.6 D	230 D	1,313 D
	2010	910 Z	**2,300 Y**	**43**	1.9	120 D	620 D
	2011	**1,600 L**	**4,800 Y**	**29 D**	1.7 JD	210 D	861 JD
	2012	890 L	**2,900 Y**	**35 J**	6.9 J	130 DJ	658 DJ
	2013	1,300 L	**5,900 Y**	**94 D**	6.1 D	310 D	1,505 D
Endpoint Criteria		1,500	2,200	5	1,000	700	10,000

Table 24-2. Analytical Results for Petroleum-Related Chemicals at SWMU 62, New Housing Fuel Leak – Sandy Cove Housing (continued)

Well Location	Year	DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MRP-MW3 Plume Area	2006	**1,800**	**38,000**	2.4 J	730	**2,500**	**13,100**
	2007	**6,300 Z**	**38,000 DY**	3.2 JD	680 D	**1,500 D**	8,400 D
	2008	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
	2009	**2,700 Y**	**40,000 DY**	**5.5 D**	610 D	**2,100 D**	**11,400 D**
	2010	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
	2011	1,200 L	**34,000 DY**	2.5 U	270 D	**1,900 D**	**10,800 D**
	2012	**2,600 L**	**31,000 DY**	0.80 JD	230 DJ	**1,900 DJ**	**11,400 DJ**
	2013	**4,600 L**	**60,000 DY**	1.6 JD	280 D	**2,200 D**	**12,600 D**
MW-107-1 Plume Area	2006	**3,400**	520	0.88 J	2.2	12	48
	2007	**4,000 Y**	270 H	0.85	3.1	12	33.7
	2008	**4,100 Y**	480 H	0.86	3.2 U	14	32.1
	2009	**3,400 Y**	400 Y	0.54	2.6	18	42.7
	2010	**4,400 Y**	400 H	0.26 J	2.0	8.4	22.6
	2011	**3,600 Y**	310 H	NP	NP	NP	NP
	2012	**2,900 Y**	NP	NP	NP	NP	NP
	2013	**2,700 Y**	NP	NP	NP	NP	NP
MW-134-11 Plume Area	2001	**7,450**	214	3.56	1.24	14.3	34.1
	2002	NP	NP	NP	NP	NP	NP
	2003	NP	NP	NP	NP	NP	NP
	2004	NP	NP	NP	NP	NP	NP
	2005	**3,500**	208	1.58	2.14	14.3	27.1
	2006	**6,300 J**	440	1.6	3.2	16	41
	2007	**5,600 Y**	470 H	1.1	2.8	27	50
	2008	**4,700 Y**	700 H	1.1	7.1	34	74
	2009	**5,600 Y**	240 Y	0.73	2.1	14	29
	2010	**4,900 Y**	410 H	0.89	3.8	26	53
	2011	**4,800 Y**	330 H	0.83	3.5	18	50
	2012	**7,100 Y**	NP	NP	NP	NP	NP
	2013	**4,300 Y**	NP	NP	NP	NP	NP
MW-146-1 Plume Area	2007	**12,000 Y**	220 H	0.14 J	0.61	3.7	35
	2008	**12,000 Y**	340 H	0.10 J	1.1 U	2.8	31
	2009	**6,800 Y**	300 Y	0.10 J	0.50 U	2.7	26
	2010	**13,000 Y**	320 H	0.090 J	0.82	4.1	43
	2011	**11,000 Y**	340 H	NP	NP	NP	NP
	2012	**7,700 Y**	NP	NP	NP	NP	NP
	2013	**9,000 Y**	NP	NP	NP	NP	NP
MW-187-1 Plume Area	2006	**3,900**	820	**18**	1.0 U	83	66.6
	2007	**3,300 Y**	630 H	**11**	0.28 J	58	75
	2008	**3,500 Y**	1,100 H	**14**	0.92 U	51	210 D
	2009	**2,400 Y**	800 Y	**8.0**	3.8	48	128
	2010	**4,400 Z**	800 H	3.6	1.0	66	125
	2011	**2,400 Y**	290 H	1.2	1.7	21	34.4
	2012	**2,300 Y**	NP	2.6	NP	NP	NP
	2013	**2,800 Y**	NP	NP	NP	NP	NP
Endpoint Criteria		1,500	2,200	5	1,000	700	10,000

Note:
Bold indicates reported concentration is greater than the endpoint criteria.

Table 24-3. Analytical Results for Petroleum-Related Chemicals at SWMU 62, New Housing Fuel Leak – Eagle Bay Housing

Well Location	Year	DRO (µg/L)	GRO (µg/L)
03-502 Plume Area	2006	**8,200**	**8,200**
	2007	**6,400 Z**	**6,700 DY**
	2008	**4,800 Z**	**5,300 Y**
	2009	1,300 Y	**3,600 Y**
	2010	1,200 Y	1,500 Y
	2011	1,400 Y	**3,200 Y**
	2012	1,300 L	**3,400 Y**
	2013	NP	**3,300 Y**
AMW-704 Plume Area	2006	**2,500**	49
	2007	**1,600 Y**	85 J
	2008	**2,700 Y**	95 J
	2009	1,200 Y	61 J
	2010	**3,800 Y**	78 J
	2011	**3,700 Y**	77 J
	2012	820 Y	NP
	2013	1,500 Y	NP
MW-303-7 Plume Area	2011	**21,000 DY**	770 H
	2012	**14,000 Y**	NP
	2013	**15,000 Y**	NP
RW-303-13 Plume Area	2006	**3,400**	94
	2007	NP	NP
	2008	**1,800 Y**	35 J
	2009	200 Y	22 J
	2010	**2,100 Y**	15 J
	2011	**2,300 Y**	25 J
	2012	56 Y	NP
	2013	430 Y	NP
RW-303-16 Plume Area	2006	**10,000 J**	92
	2007	**2,500 Y**	120 H
	2008	**6,300 Y**	120 H
	2009	**2,900 Y**	92 J
	2010	**8,600 Y**	110 H
	2011	**6,100 Y**	110 H
	2012	**2,700 Y**	NP
	2013	**4,800 Y**	NP
Endpoint Criteria		1,500	2,200

Note:
Bold indicates reported concentration is greater than ADEC cleanup levels for groundwater used as a drinking water source.

24.2.2 Eagle Bay Housing

Two of the four wells sampled (MW-303-7 and RW-303-16) had DRO concentrations above the endpoint criteria (1,500 µg/L) at 15,000 µg/L and 4,800 µg/L, respectively. DRO did not exceed endpoint criteria in wells AMW-704 and RW-303-13. GRO exceeded the endpoint criteria (2,200 µg/L) at well 03-502, with a concentration of 3,300 µg/L. Well 03-502 is also located in Area 303.

Surface water collected at location NL-09, located downgradient of the recovery trench boom in East Canal, was analyzed for DRO, GRO, BTEX and PAHs (for calculation of TAH and TAqH). Because risk-based criteria have not been established for this site, surface water results were compared to the South of Runway 18-36 endpoint criteria and State of Alaska surface water criteria. Table 24-4 presents the surface water analytical results.

Concentrations of GRO (130 µg/L), DRO (390 µg/L), TAH (19 µg/L) and TAqH (19 µg/L) were detected in the surface water sample collected at location NL-09 above endpoint criteria of 114 µg/L, 250 µg/L, 10 µg/L and 15 µg/L, respectively. Indeno(1,2,3-cd)pyrene was not detected in the surface water sample.

The sediment sample at location NL-09, located downgradient of the recovery trench boom in East Canal, was not collected in 2013 due to elevated water levels in the East Canal during the sampling event. Historic sample results for DRO, GRO, BTEX, 2-methylnaphthalene and phenanthrene are provided in Table 24-5.

Table 24-4. Analytical Results for Surface Water at SWMU 62, New Housing Fuel Leak

Location	Year	DRO (µg/L)	GRO (µg/L)	Indeno(1,2,3-cd)pyrene (µg/L)	TAH[1] (µg/L)	TAqH[2] (µg/L)
NL-09	2010	**280 J**	**230 Y**	0.020 U	**29**	**29 J**
	2011	**1,500 Y**	**260 Y**	0.021 U	**36**	**37 J**
	2012	110 Y	**150 Y**	0.020 U	**21**	**22 J**
	2013	**390 Y**	**130 Y**	0.020 UJ	**19**	**19 JX**
Endpoint Criteria[3,4]		250	114	0.28	10	15

Notes:
[1] TAH results were calculated by summing the detected concentrations of BTEX when one or more were detected and by summing the quantitation limits when none were detected.
[2] TAqH were calculated by summing the detections of BTEX and 16 PAHs when one or more were detected and by summing the quantitation limits when none were detected.
[3] The TAH and TAqH endpoint criteria are based on Alaska water quality standards as specified in 18 AAC 70.
[4] Endpoint criteria for East Canal have not been established so endpoints for South Sweeper Creek were used.
Bold indicates reported concentration is greater than endpoint criteria.

Table 24-5. Analytical Results for Sediment at SWMU 62, New Housing Fuel Leak

Location	Year	DRO (mg/kg)	GRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	2-Methyl-naphthalene (mg/kg)	Phenanthrene (mg/kg)
NL-09	2010	39 Y	6.9 UJ	0.072 U	0.072 U	0.072 U	0.144 U	0.0032 U	0.0032 U
	2011	**210 Y**	2.6 J	0.036 U	0.036 U	0.036 U	0.061 J	0.0010 J	0.0033 U
	2012	69 Y	4.7 U	0.051 U	0.051 U	0.051 U	0.102 U	0.0035 U	0.0035 U
	2013	NC	NC	NC	NC	NC	NC	NC	NC
Endpoint Criteria[1]		90.6	12.2	None	None	None	None	0.0202	0.225

Notes:
[1] Endpoint criteria for East Canal have not been established so endpoints for South Sweeper Creek were used.
Bold indicates reported concentration is greater than endpoint criteria.

24.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that that biodegradation of petroleum hydrocarbons is likely occurring by iron (II) reduction; sulfate reduction; and methanogenesis as shown by elevated ferric iron concentrations, depleted sulfates and elevated methane concentrations in comparison to background conditions. Groundwater parameters presented in Table 24-1, which were collected during the 2013 LTM event support the evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and dissolved oxygen concentrations depleted within contaminant plumes (0.00 mg/L). A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

24.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a). Trend evaluation is conducted only for analytes that exceeded the endpoint criteria within the last three sampling events and had a minimum of four data points. Results of Mann-Kendall and Sen's trend evaluations are summarized in Table 24-6. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

Sandy Cove Housing Wells:

- Wells 03-104, 03-778, MW-134-11 and MW-146-1: DRO exhibits no trend at either the 80 or 95 percent confidence interval. The coefficient of variation indicates the concentration is stable at each well.
- Wells MW-107-1 and MW-187-1: DRO exhibits decreasing trends at the 80 percent confidence interval. The Sen's slope evaluation indicated that the decreasing trends were not statistically significant.
- Well 03-155: DRO exhibits an increasing trend at both the 80 and 95 percent confidence intervals.
- Well MRP-MW2: DRO exhibits an increasing trend at the 80 percent confidence interval. GRO and benzene exhibit no trend at either the 80 or 95 percent confidence interval, with the coefficients of variation indicating stable concentrations.
- Well MRP-MW3: DRO, GRO, benzene, ethylbenzene and total xylenes exhibit no trend at either the 80 or 95 percent confidence intervals. The coefficients of variation indicate stable concentrations.

Eagle Bay Housing Wells:

- Well 03-502: The GRO concentration exhibits a decreasing trend at the 80 and 95 percent confidence intervals. Sen's evaluation indicates a statistically significant decreasing trend, with a median slope of -700.
- Wells AMW-704 and RW-303-16: The DRO concentrations exhibit no trend at either the 80 or 90 percent confidence intervals. The coefficient of variation indicates the concentrations are stable.
- Well RW-303-13: The DRO concentration exhibits a decreasing trend at the 80 percent confidence interval. Sen's evaluation indicates a statistically significant decreasing trend, with a median slope of -433.

24.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring conducted at the SWMU 62, New Housing Fuel Leak site in 2013. The conclusions are as follows:

- Groundwater Flow: The groundwater flow direction beneath Sandy Cove Housing is west-southwest and to the west-northwest toward East Canal beneath Eagle Bay Housing.
- MNA: The groundwater parameters obtained during the 2013 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Free product was observed in two Eagle Bay Housing wells during 2013 LTM activities. Free product was detected in well MW-303-8 at a thickness of 0.08 feet and in well RW-303-4 at a thickness of 0.03 feet. Periodic free product recovery performed at the site from October 2012 through September 2013 recovered 12.64 gallons of product from wells 03-101 and RW-303-15 and two recovery sumps (Appendix J).

Table 24-6. Concentration Trend Evaluation for SWMU 62, New Housing Fuel Leak

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Three Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
Sandy Cove Housing													
03-104	DRO	Yes	9,600 Y	1,500	7	1	No trend	No trend	Stable	NC	NC	NC	NC
03-155	DRO	Yes	4,400 DY	1,500	10	24	Increasing	Increasing	NA	NC	NC	NC	NC
03-778	DRO	Yes	1,700 Y	1,500	8	-1	No trend	No trend	Stable	NC	NC	NC	NC
MRP-MW2	DRO	No	1,600 L	1,500	7	9	Increasing	No trend	NA	NC	NC	NC	NC
	GRO	Yes	5,900 Y	2,200	7	1	No trend	No trend	Stable	NC	NC	NC	NC
	Benzene	Yes	94 D	5	7	1	No trend	No trend	Stable	NC	NC	NC	NC
MRP-MW3	DRO	Yes	4,600 L	1,500	6	1	No trend	No trend	Stable	NC	NC	NC	NC
	GRO	Yes	60,000 DY	2,200	6	0	No trend	No trend	Stable	NC	NC	NC	NC
	Ethylbenzene	Yes	2,200 D	700	6	0	No trend	No trend	Stable	NC	NC	NC	NC
	Xylenes	Yes	12,600 D	10,000	6	2	No trend	No trend	Stable	NC	NC	NC	NC
MW-107-1	DRO	Yes	3,600 Y	1,500	8	-9	Decreasing	No trend	NA	-167	No	-280	40
MW-134-11	DRO	Yes	7,100 Y	1,500	10	-10	No trend	No trend	Stable	NC	NC	NC	NC
MW-146-1	DRO	Yes	11,000 Y	1,500	7	-6	No trend	No trend	Stable	NC	NC	NC	NC
MW-187-1	DRO	Yes	2,800 Y	1,500	8	-11	Decreasing	No trend	NA	-179	No	-300	0
Eagle Bay Housing													
03-502	GRO	Yes	3,400 Y	2,200	8	-18	Decreasing	Decreasing	NA	-700	Yes	-1,450	-200
AMW-704	DRO	No	3,700 Y	1,500	8	-4	No Trend	No trend	Stable	NC	NC	NC	NC
RW-303-13	DRO	No	2,300Y	1,500	7	-7	Decreasing	No trend	NA	-433	No	-935	150
RW-303-16	DRO	Yes	6,100 Y	1,500	8	-6	No trend	No trend	Stable	NC	NC	NC	NC

Notes:
[1] Endpoint criteria are established from risk-based cleanup levels.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.

- **Sandy Cove Housing 102, 107 and 146 Areas:** Three areas of contamination that exceeded endpoint criteria persist in the Sandy Cove Housing Area in 2013: an area of DRO contamination on the southern side of the residential area encompassing wells 03-155, MW-134-11 and MW-187-1; an area of DRO contamination on the north-central portion of the residential area west of the General Store encompassing wells MW-146-1 and MW-107-1; and an area of DRO and GRO west of Main Road, upgradient of the airport terminal, encompassing wells MRP-MW-2, MRP-MW3, 03-104 and 03-778 (Figure 24-1). The area west of Main Road consisting of DRO and GRO is also part of the northern portion of the Area 303 contaminant plume (see Figure 7-2). All areas of contamination appear to have not changed in size since 2013. Conclusions for individual wells that are monitored are presented below:
    - Well 03-104: DRO has been detected above the endpoint criteria since 2007, and the trend analysis shows the DRO concentration is stable. Free product has not been observed in this well since 2006 (Appendix D-2). This well is located in the western-most plume which is also the northern portion of the Area 303 plume.
    - Well 03-155: DRO was detected above the endpoint criteria in 2013 for the seventh consecutive sampling event and shows an increasing trend in concentration at the 80 and 95 percent confidence intervals. This well is located in the southern-most plume.
    - Well 03-619: DRO has remained below the endpoint criteria for seven sampling events. This well is downgradient of the southern DRO contaminant plume.
    - Well 03-778: DRO was detected above the endpoint criteria in 2013. Statistical analysis shows the concentration is stable. This well is located on the northern upgradient edge of the western-most plume which is also the northern portion of the Area 303 plume.
    - Well MRP-MW2: Concentrations of GRO and benzene have exceeded endpoint criteria in this well since 2006. Statistical analysis shows that concentrations of both contaminants are stable. DRO was detected below the endpoint criteria in 2013 for the second consecutive sampling event; however the trend is increasing at the 80 percent confidence interval. TEX compounds have not exceeded endpoint criteria since 2006 (seven sampling events). This well is nested with MRP-MW3 and located within the western DRO and GRO plume which is also part of the Area 303 plume. This well was also sampled as part of Area 303 monitoring program.

- Well MRP-MW3: Concentrations of DRO, GRO, ethylbenzene and total xylenes exceeded endpoint criteria in this well in 2013. Statistical analysis shows that the concentrations of these compounds are stable. Benzene and toluene were below the endpoint criteria for the third consecutive event. This well is nested with well MRP-MW2 and located in a localized shallow perched aquifer within the western DRO and GRO plume which is also part of the Area 303 plume.
- Well MW-107-1: DRO has been detected above the endpoint criteria since 2006 and exhibits a decreasing concentration at the 80 percent confidence interval. This well is located within the central DRO contaminant plume.
- Well MW-134-11: DRO has been detected above the endpoint criteria in this well from 2005 through 2013. This well exhibits a stable concentration at the 95 percent confidence interval. This well is located within the southern-most contaminant plume.
- Well MW-146-1: DRO has been detected above the endpoint criteria since 2007 and exhibits a stable concentration at the 95 percent confidence interval. This well is located within the central DRO contaminant plume.
- Well MW-187-1: DRO has been detected above the endpoint criteria since 2006, however it now exhibits a statistically significant decreasing trend at the 80 percent confidence interval. This well is located in the southern DRO contaminant plume.

- **Eagle Bay Housing:** Three main areas of groundwater contamination were observed at the Eagle Bay Housing Area in 2013. These areas were determined from 2013 LTM results and free product recovery activities performed between October 2012 and September 2013 (Appendix L). One area is associated with the East Canal shoreline petroleum seep that is located downgradient of the product recovery trench and encompasses the recovery trench and surface water/sediment sample location NL-09. Wells sampled immediately east of RW-303-13 did not exceed endpoint criteria in 2013 (Figure 24-4). Contaminant concentrations in this area historically have exhibited a “seesawing” effect which is illustrated specifically in the Mann-Kendall trend graph for RW-303-13 (Appendix H). Similarly, the areal exceedance of endpoint criteria has expanded and contracted over time. This change may be related to year-to-year groundwater fluctuations.

  The second area is located on the southeastern portion of the site crossing Main Road and encompasses wells MW-303-07, MW-303-12, MW-303-8, RW 303-4,

HMW-303-03 and RW-303-16. This plume consists of floating free product and dissolved-phase diesel-range organics. This plume appears to not have expanded in 2013 to include well MW-303-8 due to the observance of free product.

The third area is located on the northern portion of the site encompassing the monitoring locations (counter-clockwise on Figure 24-2): MW-303-39 (Area 303 well), 03-502, 03-107 (Area 303 well), HMW-303-11, RW-303-15, 03-102, CTO-124-MW15 and 03-101. This groundwater contamination plume contains both dissolved-phase gasoline-range components and floating free product. Based on 2013 monitoring data from Area 303, it is the southern portion of the newly defined Area 303 plume.

Conclusions for individual wells that are monitored are presented below:

- Well 03-502: GRO concentrations exceeded the endpoint criteria for the third consecutive sampling event. GRO exhibits a statistically significant decreasing concentration at the 80 and 95 percent confidence intervals. This well is located within the northwestern GRO plume which is also part of the southern portion of the Area 303 plume.
- Well AMW-704: The DRO concentration was at endpoint criteria in 2013. Statistical analysis shows the concentration is stable. This well is downgradient and adjacent to East Canal.
- Well MW-303-7: This well was added to the monitoring program in 2011. DRO was detected above the endpoint criteria in all three years. This well is east of the Main Road in the southeastern plume area.
- Well RW-303-13: DRO was detected below the endpoint criteria again in 2013, which is the second consecutive event. The Mann-Kendall test indicates a decreasing trend at the 80 percent confidence level, however the Sen's evaluation did not find the trend statistically significant. This well is located upgradient and adjacent to the free product recovery trench.
- Well RW-303-16: The DRO concentration has exceeded the endpoint criteria since 2006 and it exhibits a stable concentration at the 80 and 95 percent confidence intervals. This well is located on the south side of the site within the southeastern plume.
- A shoreline inspection of East Canal again observed the presence of a petroleum seep with extensive petroleum contamination located downgradient of the free product recovery trench where booms are maintained to control sheen. Oily and

iron-stained sediments, pooled oil, stressed vegetation, surface water sheen and petroleum odor were observed along approximately 120 feet of the shoreline during the inspection. This seep appears to have expanded 10 feet to the north since the 2012 LTM event.

- Surface water sample (NL-09): This sample was collected downgradient of the maintained boom at this seep to determine the effectiveness of the boom in preventing migration of sheen downstream. The surface water sample exceeded criteria for DRO, GRO, TAH and TAqH. The sediment sample was not collected in 2013 due to uncharacteristic elevated water levels in the East Canal.

24.6 RECOMMENDATIONS

Sandy Cove Housing Area

The central and southern areas of groundwater contamination in Sandy Cove Housing appeared to be stable in size. This is confirmed by stable or decreasing contaminant concentrations trends in all wells statistically analyzed in these two areas. Based on these observations, it is recommended that monitoring at this site should continue as prescribed for wells 03-155, 03-619, MW-107-1, MW-134-10, MW-134-11, MW-146-1 and MW-187-1 to allow time for the remedy of MNA to affect changes to groundwater contamination.

Wells RW-102-4, 03-104, 03-778, MRP-MW2 and MRP-MW3 are within or near the western GRO-DRO plume that is in fact the northern portion of the Area 303 plume described in Section 7. It is therefore recommended that these wells be monitored in the future as part of Area 303 and not as part of the SWMU 62, New Housing Fuel Leak Area.

Eagle Bay Housing Area

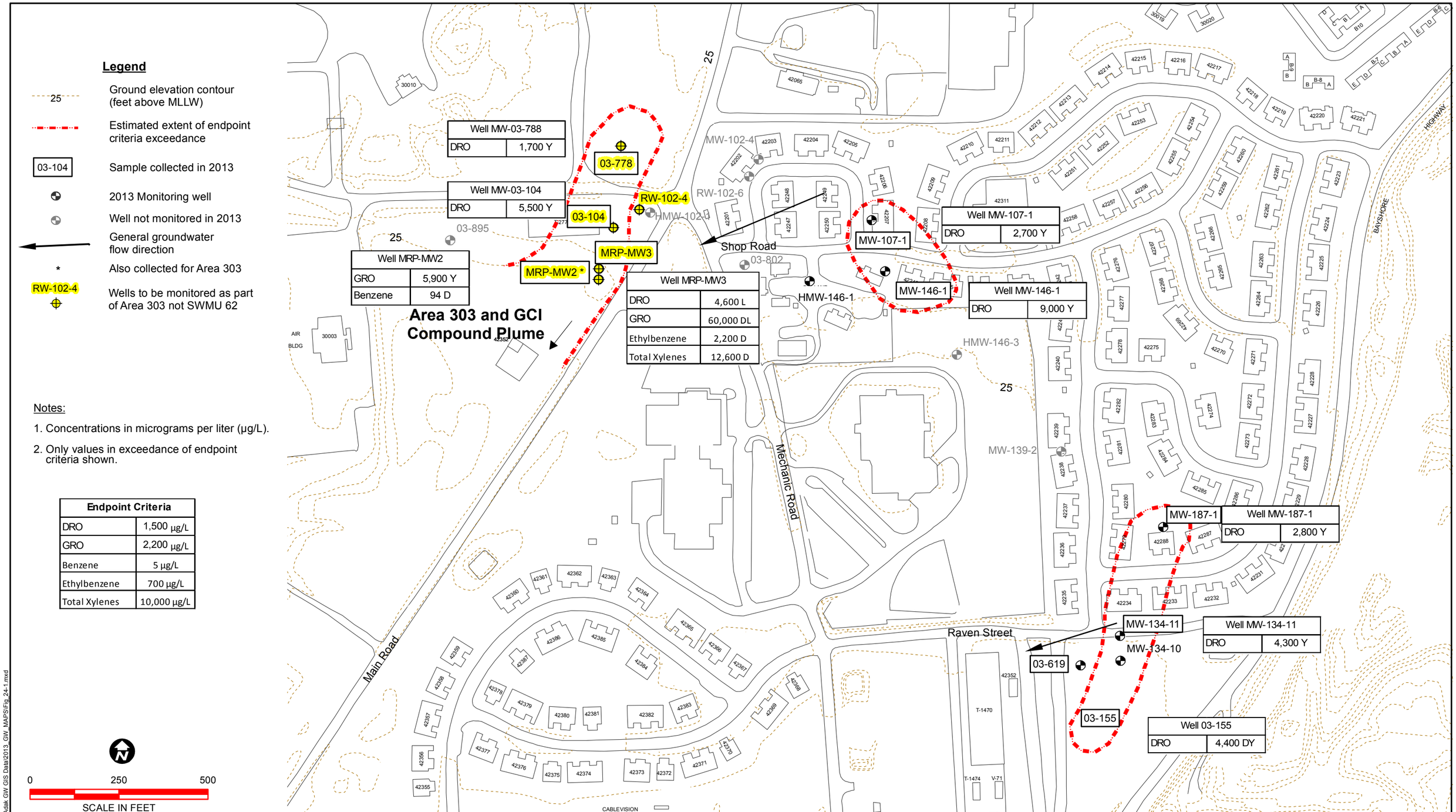
Areas of groundwater contamination at Eagle Bay Housing Area appear to stable or decreasing in concentrations. Wells adjacent to the shoreline seep, AM-704 and RW-303 remained at or below endpoint criteria for the second consecutive sampling event and showed both stable and decreasing concentration trends, respectively. However, the petroleum shoreline seep appears to have expanded since 2012 and surface water collected downgradient exceeded endpoint criteria for DRO, GRO, TAH and TAqH. The southeastern DRO plume appears to have expanded slightly to include well MW-303-8.

The area encompassed by the northern plume no longer contains DRO concentrations which exceed endpoint criteria. Additionally, gasoline constituents in well 03-502 have shown statistically significant decreasing concentrations in this plume. Based on results of Area 303

monitoring (Section 7), it has become clear that this plume is part of the southern portion of the Area 303 plume. Well 03-107, located east and adjacent to well 03-502, was sampled as part of Area 303 and exceeded endpoint criteria for GRO. It is therefore recommended that well 03-502 be monitored in the future as part of Area 303 and not as part of the SWMU 62, New Housing Fuel Leak Area.

Because natural attenuation is progressing at this site and because past monitoring has shown incremental changes to the site, it is recommended that all other monitoring at this site continue as prescribed.

Because of the continued exceedance of groundwater criteria and because of the large petroleum shoreline seep in East Canal downgradient from the site, the Navy may conduct an additional remedial alternative analysis at SWMU 62 in the future.



Notes:

1. Concentrations in micrograms per liter (µg/L).
2. Only values in exceedance of endpoint criteria shown.

Endpoint Criteria	
DRO	1,500 µg/L
GRO	2,200 µg/L
Benzene	5 µg/L
Ethylbenzene	700 µg/L
Total Xylenes	10,000 µg/L

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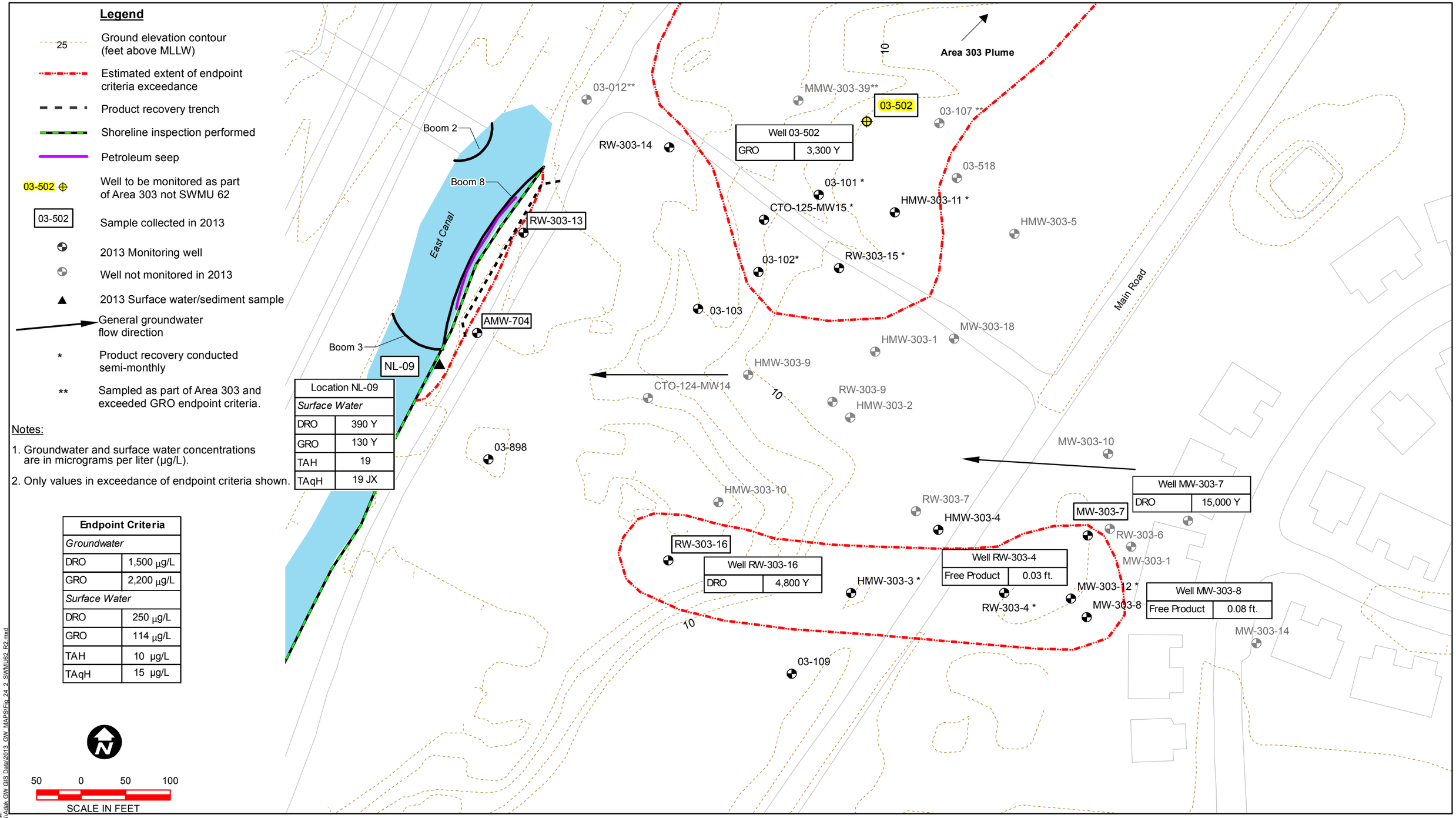
U.S. NAVY	SEALASKA	Figure 24-1 SWMU 62, New Housing Fuel Leak (Sandy Cove Housing) Sample Locations	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report



Notes:

1. Groundwater and surface water concentrations are in micrograms per liter (µg/L).
2. Only values in exceedance of endpoint criteria shown.

Endpoint Criteria	
Groundwater	
DRO	1,500 µg/L
GRO	2,200 µg/L
Surface Water	
DRO	250 µg/L
GRO	114 µg/L
TAH	10 µg/L
TAqH	15 µg/L

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U.S. NAVY	SEALASKA	**Figure 24-2** **SWMU 62, New Housing Fuel Leak** **(Eagle Bay Housing)** **Sample Locations**	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

25 TANKER SHED, UST 42494

This section presents the results of groundwater monitoring performed at the Tanker Shed, UST 42494 site during 2013. The remedy specified for this site in the OU A ROD is free product recovery (Navy, ADEC and EPA 2000). The Navy and ADEC have selected MNA with ICs as the post-free product recovery remedy for this site (Navy and ADEC 2005). To comply with requirements specified for this remedy, the Navy conducts annual groundwater sampling and water level/product thickness monitoring at the site. Groundwater samples are collected from the wells to evaluate groundwater quality relative to Alaska groundwater cleanup levels (18 AAC 75.345), to verify that natural attenuation is occurring and to monitor for surface water protection.

The following sections present field and laboratory data resulting from monitoring activities conducted at this site, a discussion of natural attenuation conditions, a comparison of target analyte concentration data to endpoint criteria specified in Section 3, trend evaluation analyses for historical target analyte concentration data, conclusions based on these analyses and recommendations for future monitoring activities at the site.

25.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at nine monitoring wells on September 3, 2013. Table 25-1 provides the measured depths-to-water (corrected for product thickness, if present), the calculated groundwater elevations and if present the product thicknesses. Figure 25-1 shows the locations of the wells relative to the potential source areas, site topography and interpreted groundwater flow direction, which is to the west-southwest, toward East Canal. Groundwater elevation data collected in 2013 were compared to historical data and are consistent with this interpretation.

Four groundwater samples were collected on September 3, 2013. One of these wells (04-601) is a surface water protection monitoring well. Field measurements were recorded on the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 25-1 lists the final field measurements recorded at each monitoring well prior to sample collection. A review of the sampling data reported for this site indicates that prior to sample collection the groundwater parameters at all wells stabilized to within specified criteria.

Table 25-1. 2013 Field Measurements for Tanker Shed, UST 42494

Physical Measurements					Groundwater Parameters						
Well Location	**Casing Elevation (ft MLLW)**	**Depth-to-Water (ft BTOC)**	**Groundwater Surface Elevation (ft MLLW)**	**Measured Product Thickness (ft)**	**pH (SU)**	**Specific Conductance (mS/cm)**	**Turbidity (NTU)**	**Dissolved Oxygen (mg/L)**	**Temperature (°C)**	**Salinity (%)**	**ORP (mV)**
04-175	11.34	6.85	4.49	0	6.13	0.289	0	0.00	10.11	0.00	-28
04-290	11.19	7.22	3.97	0	5.90	0.231	0.0	0.00	9.28	0.01	-28
04-301	11.35	6.94	4.41	0	NP	NP	NP	NP	NP	NP	NP
04-302	11.13	6.70	4.43	0	NP	NP	NP	NP	NP	NP	NP
04-306	11.17	7.21	3.96	0	6.08	0.270	0	0.00	9.78	0.00	-21
04-312	11.21	6.81	4.40	0	NP	NP	NP	NP	NP	NP	NP
04-313	11.35	6.85	4.50	0	NP	NP	NP	NP	NP	NP	NP
04-601	13.72	10.35	3.37	0	5.80	0.130	0.0	3.78	8.50	0.01	80
TS-03	9.61	6.62	2.99	0	NP	NP	NP	NP	NP	NP	NP

Notes:
The reported casing elevation is the surveyed elevation residing in the NIRIS database.
The last groundwater parameter measurement prior to sample collection is reported.

25.2 TARGET ANALYTE RESULTS

The groundwater samples collected from wells 04-175, 04-290, 04-306 and 04-601 were analyzed for DRO. Table 25-2 presents the analytical results. Figure 25-1 presents the locations of the wells sampled and the analytical results that exceeded endpoint criteria. Historical analytical results obtained for these locations are summarized in Appendix C-1. Laboratory reports presenting the 2013 results are provided in Appendix F.

Groundwater collected from wells 04-175 (11,000 µg/L), 04-290 (5,000 µg/L) and 04-306 (4,000 µg/L) contained DRO exceeding the endpoint criteria of 1,500 µg/L. DRO in downgradient well 04-601 was below the endpoint criteria.

25.3 MONITORED NATURAL ATTENUATION

NAPs were collected at this site in 2009 to determine whether natural attenuation was occurring in groundwater and to support the 5-year review process. The 2009 data indicated that biodegradation of petroleum hydrocarbons is occurring by iron (II) reduction; sulfate reduction; and methanogenesis as shown by elevated ferric iron concentrations, depleted sulfates and elevated methane concentrations in comparison to background conditions. Groundwater parameters presented in Table 25-1, which were collected during the 2013 LTM event support evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and depleted dissolved oxygen concentrations (0.0 mg/L) within the plume at the site. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

25.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012a). Trend evaluation is conducted only for analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. Results of the trend evaluations are summarized in Table 25-3. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Wells 04-175 and 04-306: The DRO concentrations exhibit no trend at the 80 percent or 95 percent confidence intervals for data from 2005 to 2013. The coefficients of variation indicate that the concentrations are stable.
- Well 04-290: DRO exhibits an increasing trend at the 80 percent confidence interval for data from 2005 through 2013.

Table 25-2. Analytical Results for Petroleum-Related Chemicals for Tanker Shed, UST 42494

Well Location	Year	DRO (µg/L)
04-175 Plume Area	2001	**16,900**
	2002	NP
	2003	NP
	2004	NP
	2005	**7,080 J**
	2006	**11,000**
	2007	**6,600 Y**
	2008	**4,700 Y**
	2009	**7,700 Y**
	2010	**6,100 Y**
	2011	**5,600 Y**
	2012	**5,500 Y**
	2013	**11,000 Y**
04-290 Plume Area	2001	**9,220**
	2002	NP
	2003	NP
	2004	NP
	2005	**2,890 J**
	2006	**9,000**
	2007	1,000 Y
	2008	**2,600 Y**
	2009	**4,300 Y**
	2010	**4,300 Y**
	2011	**5,900 Y**
	2012	**5,600 Y**
	2013	**5,000 Y**
04-306 Plume Area	2005	**2,500 J**
	2006	**FP**
	2007	**FP**
	2008	**5,200 Y**
	2009	**4,400 Y**
	2010	**4,300 Y**
	2011	**7,200 Y**
	2012	**4,700 Y**
	2013	**4,000 Y**
04-601 Surface Water Protection Well	2001	**2,620 J**
	2002	**2,600**
	2003	1,000
	2004	**2,520**
	2005	**2,850**
	2006	1,100
	2007	180 Y
	2008	120 Y
	2009	100 YJ
	2010	97 U
	2011	98 Y
	2012	280 Y
	2013	55 H
Endpoint Criteria		1,500

Note:
Bold indicates reported concentration is greater than the endpoint criteria.

25.5 CONCLUSIONS

This section presents conclusions based on a review of groundwater monitoring conducted at the Tanker Shed, UST 49424 site in 2013. The conclusions are as follows:

- Groundwater Flow: Based on the water levels measured in 2013, the interpreted groundwater flow direction at the site is to the west, toward East Canal.
- MNA: The groundwater parameters obtained during the 2013 LTM event showed evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Free product was not detected in any of the wells during the 2013 LTM.
- Well 04-175: DRO has been detected at a concentration above the endpoint criteria every year sampled since sampling started in 2001 and is statistically stable. Well 04-175 represents the upgradient, eastern edge of the contaminant plume.
- Well 04-290: DRO has been detected above the endpoint criteria every year sampled since 2001, except for 2007. The DRO shows an increasing trend at the 80 percent confidence interval.
- Well 04-306: DRO remained above the endpoint criteria in 2013. DRO exhibits statistically stable concentrations at the 80 and 95 percent confidence intervals. This well is located within the center of the contaminant plume.
- Well 04-601: DRO remained below the endpoint criteria since 2006 (eight consecutive sampling events). This well is a surface water protection well located downgradient of the plume.

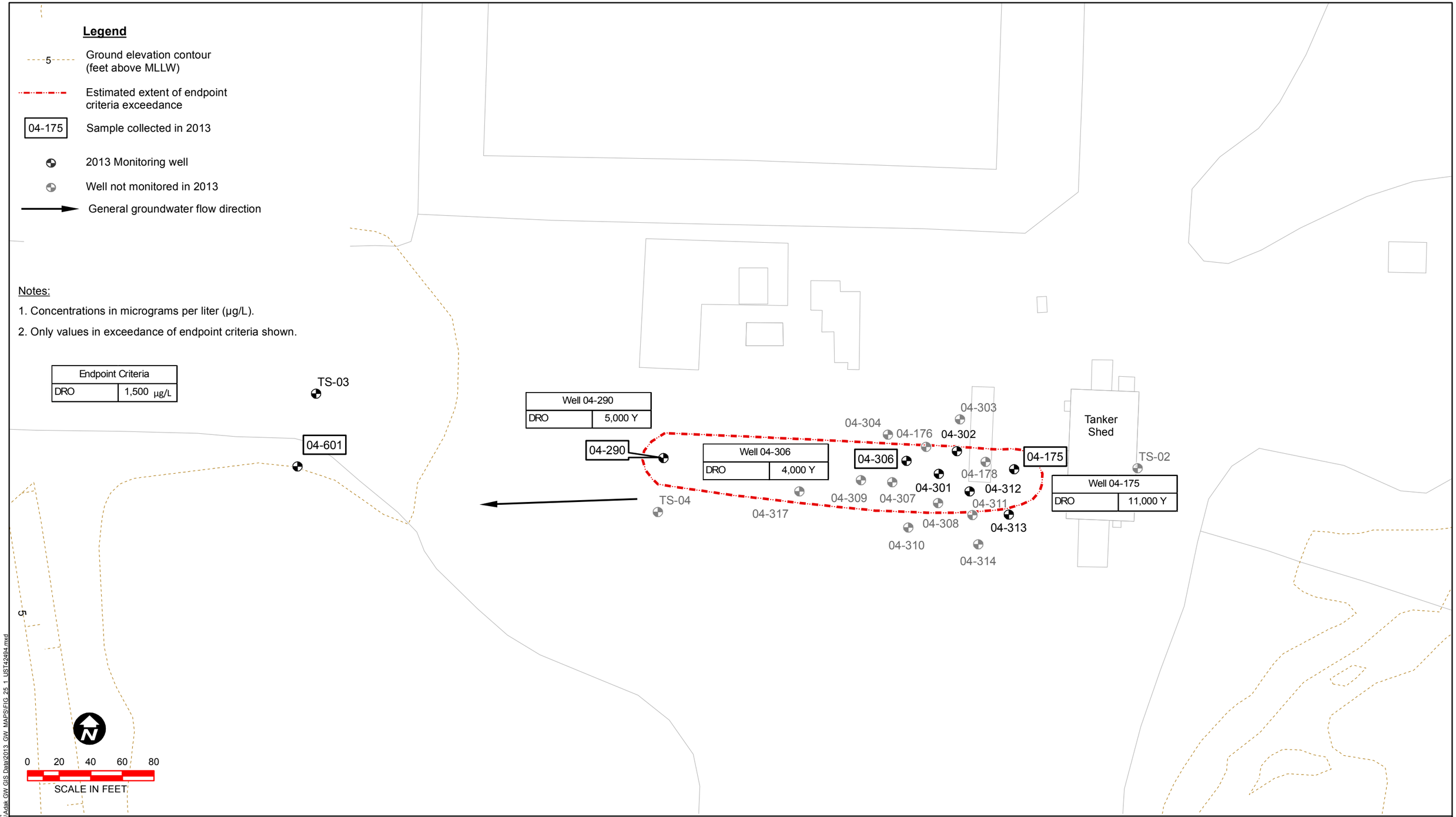
25.6 RECOMMENDATIONS

Because natural attenuation is progressing at this site and because past monitoring has shown incremental changes to the site, it is recommended that all monitoring at this site be continued as prescribed.

Table 25-3. Concentration Trend Evaluation for Tanker Shed, UST 42494

							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	**Target Analyte**	**Exceeds Endpoint Criteria**	**Highest Concentration Last Two Sampling Periods (µg/L)**	**Endpoint Criteria[1] (µg/L)**	**Sampling Periods (n)**	**Mann-Kendall Statistic (S)**	**Trend at 80% C.I.**	**Trend at 95% C.I.**	**Concentration Stability[2]**	**Median Slope**	**Statistically Significant Trend**	**Lower Limit**	**Upper Limit**
04-175	DRO	Yes	11,000 Y	1,500	9	-7	No trend	No trend	Stable	NC	NC	NC	NC
04-290	DRO	Yes	5,600 Y	1,500	9	11	Increasing	No trend	NA	NC	NC	NC	NC
04-306	DRO	Yes	4,700 Y	1,500	7	1	No trend	No trend	Stable	NC	NC	NC	NC

Notes:
[1] Endpoint criteria are established from risk-based cleanup levels.
[2] Concentration stability is determined from the coefficient of variation when no trend exists at the 80% confidence interval (C.I.).
Sen's Slope is calculated for target analytes with decreasing concentration trends only.



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U.S. NAVY	SEALASKA	**Figure 25-1** **Tanker Shed, UST 42494** **Sample Locations**	Task Order 66 Adak Island, AK 2013 Annual Groundwater and Landfill Monitoring Report

26 REFERENCES

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APPENDICES

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APPENDIX B SAMPLING DEVIATION FORMS (Provided on disc)

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APPENDIX A

FIELD FORMS AND LOGBOOK

Rite in the Rain®
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TOBS Adak LTM 2013
QC OUA
Start: 08/26/13
End: 09/19/13

Phone #s

Andy	cell	206-909-3093
Beth	"	360-930-4663
Bob	"	360-298-4872
Don	"	360-204-4478
Ellie	"	907-355-8697
John	"	907-572-9761
Steve	"	253-279-0212

Andy/Bob	Unit 111A	907-592-2181
Sherri/Annette	" 111B	907-592-2348
Bob/Ellie	" 111C	907-592-2155
Don	" 167C	~~360~~ 907-592-2157 SW 8/23/13
Steve/Aaron	" 108D	907-592-2204
Satellite Phone		206-326-3193

Gold Streak Reservations:
1-800-225-2752
Acct # 27442464 7/10
ID # 22456

Airport Weather 12/18/13 907-592-3921 907-592-9207

Book #: QC
Task Order: 66
Contract: N44255-09-D-4005
Project: Adak LTM 2013
Navy Installation: Former Naval Complex, Adak, AK

Site Name: OU A
Start Date: 8-26-13
End Date: 9/19/13
Book Assignment: QC (Sherri Wunderlich)
Company: Sealaska Environmental Services
Address: 18743 Front St NE, Suite 201 Poulsbo, WA 98370
Phone: 360-930-3300

Reviewed By: Tom
Date Reviewed: 12-18-13

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entries by Sherri Wunderlich

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Sherri Wunderlich 9/19/13

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Project TO 66 Adak LTM 2013

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ASF
12-18-13

TO 66 Adak LTM 2013 8/26/13

0700 Meeting held at 111B. Discussion of field activities for today; all teams will be working at Former Power Plant, roadmaps are passed out. Safety & health discussion by John Highstone w/ oversight by SSHO Don Balmer. Meeting attendees are documented on the safety briefing form. QC items discussed include the following:

- read Stand Alone Specific Instructions (SASI), which is App C for GW CMP Plan, notify QC of discrepancies or items of concern (if different than procedures discussed in meetings)
- be careful w/ stabilization criteria, calculations
- field QC samples for today include trip blks, field dups & MS/MSD sets
- mistakes get single line-out, collected, dated & initialed
- include "-2013" suffix to sample IDs
- field Naps require field dup for test kits if lab Naps are designated for field dup

Sherri Lulich 8/26/13

TO 66 Adak LTM 2013 8/26/13

0700 CONT.

- Discussion re. whether to filter ferrous iron test kit aliquots. GW CMP text & App C SASI do not indicate filtering while SASI does. Previously (when following older CMP in 2009) we did not filter, John H confirms URS did not filter during spring/summer event. Decision is to not filter.
- Discussion re. collection of sediment samples. GW CMP WS 17 indicates collection of grab samples & methanol preserved GRO & BTEX while SASI #12 indicates

0800 Assist teams preparing for field. Label & designate trip blanks. (No trip blank is necessary for methane by RSK175 per SLW 8/26/13 GW CMP WS 12.) Ensure Horibas are calibrated, bump test for PIDs.

1000 Arrive at Former Power Plant. Rotate between Teams 1, 2, 3 to observe & provide input as needed while monitoring & sampling wells. The pH readings by Teams 2 & 3 are suspiciously low. The DO readings by all 3 teams are 0.0 mg/L. Teams meet stabilization criteria.

Sherri Lulich 8/26/13

TO 66 Adak LTM 2013 8/26/13

1000 CONT then proceed to collect samples & test kit analyses. After sampling the three wells, Team 1 piggybacks their Horiba with the ones from Team 2 (at MW-~~30~~ 1451-8) and Team 3 (at MW-1451-4). Comparison readings are documented on the forms for those two wells. SLW 8/26/13

1400 Back at housing units. All three Horibas are checked by inserting into filtered tap water. All display "typical" readings for DO in tap water (9-10 mg/L) Horibas for Teams 2 & 3 display low pH (~3-4). Team 3 pH is 4.42. Instrument vendor is called to discuss pH issue. Problem seems to be resolved by adjusting calibration procedure as recommended by vendor. Teams will not select "Auto calibration". SLW 8/26/13

Discuss w/ Annette.

1615 Team 1 reports that Former Power Plant MW-1451-7-2013 had PT = 0.50 ft and therefore did not sample.

1630 Email Greg Salata (ALS Environmental)

Sherri L Walsh 8/26/13

TO 66 Adak LTM 2013 8/26/13

1630 CONT to ship 28 1 L amber w/ HCl glass bottles (for DRO AK102 water) and 72 gel packs. Notify Greg that our first shipment of samples will arrive at PDX on Friday 8/30 & second shipment will arrive on Mon 9/2, which is Labor Day.

1715 Assist teams as they arrive back from sampling. Discuss activities

2100 Review Team 1 & Team 3 field forms, logbooks for today's activities.

2330 End of day

Sherri L Walsh 8/26/13

TO 66 Adak LTM 2013 8/27/13

0700 Meeting held at 111B. Discussion of field activities for today. The plan is to finish field activities at Former Power Plant and, if time, move onto Area 303. QC items discussed including the following.

- Before sampling Area 303, verify appropriate trip blanks are assigned
- Discussed Horiba calibration issue from yesterday. No issues were experienced w/ Team 1's Horiba. For Former Power Plant well MW-1451-8 (sampled by Team 2) and MW-1451-4 (" " " 3), we will report post-sampling field measurements conducted by Team 1's Horiba and generate a sampling deviation form. After consultation w/ equipment vendor, adjustments were made to the calibration process. Afterwards, Team 1's Horiba & Team 2's Horiba were both OK. Team 3 continued to experience problems, and switched to using Team 1's Horiba yesterday

Shenna [illegible] 8/27/13

TO 66 Adak LTM 2013 8/27/13

0700 CONT afternoon. Today Team 3 will use the backup Horiba U22. (same as used for LTM 2012)

- New field forms are issued to replace templates brought onsite from 8/26/13 & used on 8/26/13. Info will be transferred to the new field forms, which contain the appropriate & necessary prompts for entries.
- caution regarding DO test kit use, sample aerates quickly & air bubbles can be ~~trapped~~ sucked into pipette (per Annette's observation) SLW 8/26/13 ~~[illegible]~~ SLW 8/26/13 result in artificially high reading
- Need to generate sampling deviation forms for two FPP wells, MW-1451-7 & MW-1451-9, which contained product at 0.50' and 0.02', respectively and therefore cannot be sampled.
- At Area 303 MW-303-28, product may be encountered. If ≥ 0.02', no ~~[illegible]~~ SLW 8/26/13 sample will be collected and

Shenna [illegible] 8/27/13

TO 66 Adak LTM 2013 8/27/13

0700 CONT we will move the scheduled field duplicate parameters to Area 303 03-107.

0800 Discuss field forms & logbooks from yesterday with teams, as appropriate, when documentation can be improved. Assist teams gearing up for field mobilization.

0900 Office work. Solve internet connection issue in which internet is unavailable to others after logging out & disabling connection. The trick is to log out manually by typing the following link into the URL bar of the web browser:
windycitywifi.hotspotssl.net/logout

1200 Prepare trip blanks for teams, as necessary, to accompany volatile aliquots of samples to be collected from Area 303 in the afternoon.
Assist teams returning from lunch and back to field afterwards

Shawn L Wilh 8/27/13

TO 66 Adak LTM 2013 8/27/13

1500 As Team 3 is about to head back out to the field, John Highstone reports that the first three samples Team 3 collected were collected after traveling through the flow-through cell. The impacted sample locations are Former Power Plant wells MW-1451-2, MW-1451-3, and MW-1451-4. Their fourth sample (from MW-1451-6) was collected correctly. We will resample the three impacted samples. Due to limited test kits in our current possession and that precision was determined during initial sampling, no field dup for test kits will be conducted at MW-1451-2.

1600 Go to Bering Hill w/ Annette. Stop at Former Power Plant and Area 303 to check on teams. All OK. Assist teams by transferring test kits from well to well.

1700 Assist teams returning from field. Assist Team 1 regarding 10x dilution for ferrous iron test kit

John C Wilh 8/27/13

TO 66 Adak LTM 2013 8/27/13

20:30 Review paperwork
23:45 off for day

Sherri Lewis 8/27/13

TO 66 Adak LTM 2013 8/28/13

0700 Meeting held at 111B. Discussion of field activities for today. Plan to finish Former Power Plant & Area 303 today, before moving on to South of Runway & SWMU 60 (likely tomorrow). All Area 303 DTW to be collected before 1500 (within 24 hrs for all wells to be gauged per site).

QC items discussed include:

- Reminder to disconnect tubing from flow-through cell prior to sampling
- Add "SWMU 55" to CERCLA drum label (SWMUs 14, 17, 25 and 55)
- Record unit of measure in logbook (DTW & DTB in feet, test kits in ppm, field parameter measurements)
- Record PPE daily in logbooks, document in logbooks that we conduct hazard & physical survey at each well
- Each team to take a site photo along w/ photo of each sampling location. Ensure location name shows in photo.

Sherri Lewis 8/28/13

TO 66 Adak LTM 2013 8/28/13

0700 CONT
- Discuss shipping of samples tomorrow; teams will provide COC forms for review by 11:00 or shortly thereafter
- To avoid collection of 7-day HT parameter (PAHs in water) on Thurs afternoon 8/29/13 because lab will not receive until Tuesday following Labor Day, schedule will be revised accordingly. SWMU 62 shoreline inspection ~~not~~ now SW 8/28/13 planned for Thur 8/29 afternoon.

H&S briefing by John.
- Switch out gel packs in coolers each day

0800 Office work. Review roadmaps for GCI, Arctic Arrest & SWMU 62 south of Runway, Eagle Bay Housing Complex. Identify error & discuss w/ Annette: For SWMU 62 Eagle Bay well 03-502, the Final GW report recommends GRO. Revised CMP table indicates BTEX & GRO; roadmap indicates BTEX. Will generate an FCR.

Thomas W M 8/28/13

TO 66 Adak LTM 2013 8/28/13

0800 CONT
More office work...
Team 3 calls to discuss potential error with Area 303 well names. Annette resolves. Two wells were labeled MW-303-40. One is labeled correctly; the other is actually MW-303-44. Team 3 relabels well, as directed by Annette.

1000 Office paperwork w/ intermittent trips to Former Power Plant & Area 303 to assist and check up on teams. All are sampling w/ tubing coming directly from well (not through Horiba).
Team 2 asks for clarification regarding sample collection times on bottle labels. PQCM responds that same time goes on all bottles for sample & MS/MSD aliquots. Elle from Team 2 reports that she recorded

Thomas W M 8/28/13

TO 66 ADAK LTM 2013 8/28/13

1000 CONT actual times for each parameter for one well yesterday. We decide not to change bottles; lab will note that the times are different and we'll know why. Transport test kits from team to team before heading back to the unit.

1200 Assist teams coming ~~for~~ back for lunch, then continue with office work w/ intermittent trips to field

1500 Office work

1700 off for day

Shawn Cullen 8/28/13

TO 66 ADAK LTM 2013 8/29/13

0700 Meeting held at 111B. Discussion of field activities for today. We will continue sampling at Area 303 this morning, prepare bottles for shipment & take to Alaska Airlines around 1300, then perform well inspections and catch up on paperwork this afternoon. Sherri & Barb to fill in a hole at Former Power Plant. QC items discussed include the following.

- keep bottles upright in coolers w/ exception of VOCs due to packing alternatively ( ).
- replace ice daily or as needed (check daily)
- need to record ml recovered from wells (e.g FPP MW-1451-7 recovered 380 mL)
- when documenting numbers less than "1" be sure to write "0" before the decimal point as applicable in logbooks & on field forms

Shawn Cullen 8/29/13

TO 66 ADAK LTM 2013 8/29/13

0700 John Highstine covered H&S
CONT items.

0800 Call Goldstreak reservation
~13 coolers
AWB # 8286 9485
Logged onto computer & confirmed tracking info was correctly entered.

0900 Field crew reports Area ~~300~~ 303
SLW 8/29/13
MW-303-41 is dry. The MSD scheduled ~~MADD~~ for that well (NAPS only) will
SLW 8/29/13
be moved to MW-303-42.
Office work

1030 As teams return from field to pack up samples & get them ready for shipment, check their COC forms vs. field roadmap and official scope changes. Verify COC forms are correct for all 3 teams.

1200 Ask Annette to inspect coolers while I continue with checking COC forms. All OK.

Sherri L Walsh 8/29/13

TO 66 ADAK LTM 2013 8/29/13

1430 Go to Former Power Plant with Barb to fill a hole near MW-145-S. Miscellaneous field assistance & office work

1645 Meet Cara, Beth & Aaron (RPM) at airport. Assist moving them into their units

1730 Break

~~1815~~ 2015 Office work
SLW 8/29/13

~~1845~~ 2345 Off for day
SLW 8/29/13

Sherri L Walsh 8/29/13

TO 66 ADAK LTM 2013 8/30/13

0700 Meeting at 111B. Planned field activities today include Team 1 - S of Runway, SWMU 60; Team 2 - South of Runway, Team 3 - ~~South of Runway shoreline~~ SLW 8/30/13 ~~inspection~~ SLW 8/30/13 Area 303 one well MW-303-39 & SWMU 60; IC inspections by IC Team & QC items discussed today include the following.

- Sherri will assign trip blanks for teams today, teams will check to ensure label is OK & matches analysis
- ~~started~~ confirmed SLW 8/30/13 w/ Team 1 that they relabeled Former Power Plant MW145-7 after photographing. Photo shows name written on white board; Team 1 indicates it was raining at the time & they went back & relabeled the well later
- mistakes need crossed out, corrected, initialed & dated; don't write over to correct!
- record DTW, DTB w/ two decimal points
- Team 1 confirmed they've collected two field dups for

Sherri L Walsh 8/30/13

TO 66 ADAK LTM 2013 8/30/13

0700 CONT test kits
- dissolved & total lead go in separate baggies

0725 Earthquake ~~7.0~~ 6.8 magnitude near ~~Tok~~ Atka SLW 8/30/13 meeting continues, John discusses H&S

0800 Prepare trip blanks for teams. Assist fieldcrew getting ready for field activities

0900 Take backup peristaltic pump to Team 3 at Area 303 MW-303-30.

0920 Back at 111B for office work.

1000 Generate FCR to ~~discontinue~~ SLW 8/30/13 omit BTEX sampling at SWMU 62 Eagle Bay well 03-502.

1130 Review roadmaps vs. 2013 revised CMP tables.

1630 Perform ferrous iron test kit on water used for making dilutions to verify we have not introduced a high bias. Ferrous iron is not detected.

1645 Discuss field firms with Annette.

Sherri L Walsh 8/30/13

TO 66 ADAK LTM 2013 8/30/13

1715 Fieldcrew returns. Assist & go over field forms

1900 Off for day

Sherri C Walsh 8/30/13

TO 66 ADAK LTM 2013 8/31/13

0700 Meeting at 111B. Planned field activities for the day include NMCB DTW/P, South of Runway SW & sed, SWMU 60 SW Arctic Acres ~~Arcs~~ SWMU 60 SWP 8/31/13; SA 79 / South of R/ Shoreline inspection. IC inspections at various sites.

QC items discussed include~~s~~ SWW 8/31/13 the following.

- Good field logbook documentation. Team 1 is recording "conduct physical hazard survey", "no hazards observed" or "observed nearby piles of sheet metal". Optional to document if disposing purge water on ground.
- When switching the days gameplan around, be cautious to ensure trip blanks are in play. No problems in this area yesterday.
- an error w/ intake tubing calculation was discovered real time by team performing the sampling and corrected, excellent teamwork.

Sherri C Walsh 8/31/13

TO 66 ADAK LTM 2013 8/31/13

0700 CONT. - Sherri will get together with Aaron when convenient to go over Sampling Deviation Forms & FCR. John discusses health & safety.

0800 Discussed FCR & Sampling Deviation Forms generated to date w/ Aaron & Steve (RPM & NTR, respectively). Obtain their signatures, as appropriate. The forms include the following.

Form & Description

- FCR-TO66-1: SWMU62-EB, 03-502, omit BTEX per AGWMP
- SDF, Former Power Plant MW-1451-8: Post-sampling Horiba readings will be reported
- SDF, Former Power Plant MW-1451-7 & MW-1451-9: No sample will be collected due to PT ≥ 0.02'
- SDF, Area 303 MW-303-08: No sample will be collected due to PT ≥ 0.02'
- SDF, Area 303 MW-303-41: No sample will be collected because

Sherri L Wall 8/31/13

TO 66 ADAK LTM 2013 8/31/13

0800 CONT the well is dry; switch QC samples to another well

- SDF SWMU60 652 & 653: No sample will be collected due to PT ≥ 0.02'
- SDF Former Power Plant MW1451-2: field dup for test kit parameters will be performed at another location.

0900 Work on Contractor Production QC Reports

1100 Break

1330 Office work

1900 Break

~~2300~~ 2200 Review COC forms vs. official scope (2013 Revised CMP Tables) and roadmaps. Identify items to resolve tomorrow.

SLW 8/31/13

2330 Off for day

Sherri L Wall 8/31/13

TO 66 ADAK LTM 2013 9/1/13

0940 Call Alaska Airlines to reserve Gold Streak shipping of coolers today, 7 coolers will arrive at Portland on 9/2/13 at 5:40 A.M. Portland facility opens at 8:00 A.M.

1000 Logged on to Alaska Airlines website to confirm the AWB is 027-8287-7340. All OK.

1015 Send email to Greg & Barbie at ALS Environmental to notify them about the cooler & provide tracking number. Ask Greg about temps & receipt conditions for shipment received 8/30/13.

1030 Greg replies that first shipment of 12 coolers received by lab on 8/30/13 had acceptable temperatures.

1100 Oversee packing of coolers for today's shipment. Resolve COC for issues and approve all.

1730 Generate Sampling Deviation Forms for three NMCB wells (NMCB-07, NMCB-10 & NMCB-11) due

Sherm L Wilk 9/1/13

TO 66 ADAK LTM 2013 9/1/13

1730 CONT to product thickness ≥ 0.02 feet. An MSIMSD for GRO was scheduled at NMCB-11; switch to a new location.

2300 ~~1400~~ SLW 9/1/13 Review field forms from yesterday.

2345 Off for day.

Sherm L Wilk 9/1/13

TO 66 ADAK LTM 2013 9/2/13

0700 Meeting at 111B. Plan is to do an NMCB well or two per team, depending on weather. Team 1 may do SW sed at South of Runway. Team 3 may do NMCB sediment. Safety & health briefing. QC items discussed include the following

- New trip blanks & COC forms will be needed today
- Check bottles to ensure they contain preservatives, as appropriate.
- Teamwork to qc any calculations performed in field (intake tubing length, stabilization) & verify bottle labels

- Temps OK for last Friday's shipment as confirmed by lab
- Move MS/MSD, for iceo from NMCB-11 (which had PT ≥ 0.02') to 02-451
- if sampling sediment at NL-05 for GRO preserved in methanol, do not allow rainwater to get into the sample

Owen Lutz 9/1/13

TO 66 ADAK LTM 2013 9/2/13

0800 Prepare trip blanks for teams. Get bottles ready for NL-05 sediment.

0900 Meet Team 3 near location of NL-05. Having difficulty finding sampling location

0930 Return to Unit 111B to look at last years photos of NL-05 location, get coordinates & GPS unit

0940 Back to vicinity of NL-05. Easily able to identify sampling location from last year's photos and remnants of red markings.

0955 Collect NL-05S-2013

- GRO (AK101) 2 x 4 oz amber ~25 grams of sediment + 25 mL MeOH surrogated
- 2 x 2 oz glass for dry weight determination

Location with surrounding rocks are wet; unable to label/mark location for ease in finding next year. John and Barb (Team 3) will return on a dry day to relabel.

Owen Lutz 9/2/13

TO 66 ADAK LTM 2013 9/2/13

1015 Back at Unit 111B.

1615 Send CPQC Reports for 8/26/13 through 8/31/13 to Aaron Vernik & Steve Skeehan.
Send signed FCR-TO66-01 & Sampling Deviation Forms generated 8/26/13 to 8/30/13.

1630 Email Greg Sclatc to find out minimum sediment amount needed for the following tests, as applicable to Palisades LF.
PCB Aroclors (8082 Low Level)
PAHs (17) (8270D SIM)
B2EHP (8270D Low Level)
Sb, As, Ni (6020A)
Dry weight

1700 Off for day

Sherri Wilk 9/2/13

TO66 ADAK LTM 2013 9/3/13

0700 Meeting at 111B. Game plan is as follows.
Team 1 - South of Runway A SWMU 66 surface water & sediment, NMCB well(s) sample
Team 2 - NMCB wells to sample
Team 3 - free product for another task order / LTM and 9 Tanker Shed inspections (to be supported by other teams as they finish other assignments)
QC items include discussion of trip blanks, no need to calibrate Horiba if not using it for that day (as applicable to team 3 today).
John gives H&S briefing

0800 Assist teams mobbing for field. Prepare trip blanks as appropriate. Aaron asks me to relay message to Annette to include more discussion of SWMU 66 surface water location 852 in AGWMR. Location last year was shifted ~75 feet from prior years due to lack of water at location.

Sherri Wilk 9/3/13

TO 66 ADAK LTM 2013 9/3/13

0800 CONT. less flow ~~as a~~ than prior years due to minus low tide. DW Results for 852 surface water in 2012 were lower than prior three years. Aaron signs Sampling Deviation Form for NMCB wells NMCB-07, NMCB-10 & NMCB-11; no samples will be collected due to pH ≥ 0.02! SW 9/3/13

1100 Receive an email from Greg Salata at ALS Environmental. For second shipment that was picked up by lab personnel today, temperatures were fine. The following VOC vials broke but sufficient vials are available for analysis.

N SWSD-7-2013	2/9 vials for BTEX
651-2013	1/3 " " "
MW-2006-2013	1/3 " " benzene

We had included enough gel packs to keep samples cool through Labor Day if Alaska Airlines inadvertently didn't refrigerate the coolers.

All OK.

Sherri LWM 9/3/13

TO 66 ADAK LTM 2013 9/3/13

1150 Exchange emails w/ Annette regarding SWMU 60 852 surface water location. Pass along Aaron's message. After checking with Andy, update Annette that we collected the sample in the same vicinity as in 2012 because of lack of sufficient water in historic spot.

1230 Greg Salata responds to email that 4 ounces is sufficient (but tight) to perform sediment analyses scheduled for Palisades; these include the following

PCB Aroclors (8082 Low Level)
PAHs (17) (8270D SIM)
B2EHP (8270D Low Level)
Sb, As, Ni (6020A)
Dry weight.

As preferred, we will collect more & a backup if at all possible at all locations

1400 Office work.

2000 Off for day

Sherri LWM 9/3/13

TO66 ADAK LTM 2013 9/4/13

0700 Meeting at 111B. Gameplan for today. Team 1 to Palisades LF, Sherri will watch for rogue waves. Team 2 at SA 80, Team 3 will do NMCB shoreline inspection (w/ Beth or Cara watching for waves), SA79 & O&M activities for another task order. QC items discussed include the following

- reply to #10 on the inspection form regarding whether ~~water~~ sheen is present in the water, intent is to answer to the best of your knowledge (may be an probe, if product is present then sheen is present) SLW 9/4/13
- asked IC team if they inspected Kuluk Bay; they indicated 'yes' on last Friday or Saturday
- Aaron indicates we don't need to revise the Production Report to include
- on water sampling log, convention is to record time of arrival at well in header; Aaron indicates

Sherri L Walsh 9/4/13

TO66 ADAK LTM 2013 9/4/13

0700 CONT it's not too important & agrees no need to correct forms, but teams will follow the convention from now on.

John gives health & safety briefing.

0800 assist teams preparing for field activities. Prepare to leave for Palisades Landfill

0830 Arrive at road near Palisades Landfill ~~to~~ to assist Team 1 with sample collection. Activities are documented in Team 1 logbook. Took several photographs, see photo log SLW 9/4/13

1200 Back to office to review field forms, download photos, etc.

1630 Break

1630 Office work

2345 Off for day

Sherri L Walsh 9/4/13

TO 66 ADAK LTM 2013 9/4/13

PHOTO LOG FOR 9/4/13

Time	Description	Direction facing
09:02	Palisades LF overview	WSW
09:02	" " "	WSW
09:07	Sed 102 sample collection	
09:08	" " " "	
09:09	" " location	S
09:10	" " - Bob labeling sample jars	
09:10	" " closeup	
09:52	Sed 103 sample collection	
09:52	Sed 103 sample jars	
11:31	Sed 101 in a jar	
11:32	Sed 101 closeup	
1132	Sed 101 location	S
1134	Sed 101 location	S

Shumi Clark 9/4/13

TO 66 ADAK LTM 2013 9/5/13

0700 Meeting at 111B. Scheduled activities for today include SA 79, SA80, ROICC & GCI sampling and/or well inspections. Obtained approximate cooler count (7 or 8) & dimensions/weight for returning equipment.

0750 Call Alaska Airlines to make Gold Streak reservation for 8 coolers AWB #027- 8288 7781

0810 Call Alaska Airlines to make Gold Streak reservation for 3 pieces of equipment to be returned to Argus-Hazco.
2 @ 23x20x9"
1 @ 19 x 16x6"
Contact for vendor is Dustin Hartley, 800-332-0435
Will arrive at Dallas/Ft Worth on 9/6/13 at 12:35
AWB #027- 8288 7862

0820 Email tracking # to lab (Greg/Barbie)

0830 Annette calls ~~the~~ SWM 9/5/13 Provide her with update. Relay John & Barb concerned w/ MW303-28 containing more

Shumi Clark 9/5/13

TO 66 ADAK LTM 2013 9/5/13

0830 than AnGas; Barb will check into
CONT black & yellow cartridges. Annette
indicates she will discuss
further with John.

0900 Email Dustin Hartley after I
can't reach him via phone.
Provide AWB # for shipment
arriving at Dallas-Fort Worth
tomorrow.

0945 Reply to email from Aaron
about analyses scheduled
for Area 303 and Former
Power Plant

1100 Review COC forms from teams
as they return from this
morning's field activities.
Check cooler packing.
All is well.

1300 Office work

1630 Identify that SA80 SP4-3, which
was sampled today by Team 2,
did not meet stabilization criteria.
Need to cancel analyses; sample
was shipped to the lab today.

1730 Discuss SA80 SP4-3 with
[signature] 9/5/13

TO 66 ADAK LTM 2013 9/5/13

1730 Team 2. They had switch roles
CONT. & didn't verify stabilization
criteria had been met.
Will resample tomorrow.
Also discussed DTB at two
SA80 wells that weren't
consistent with 2011 & 2012
measurements. They triple-
checked the measurements
this year. Don suggests to
have Team 3 check DTB w/
their equipment.

1900 Off for day

[signature] 9/5/13

TO 66 ADAK LTM 2013 9/6/13

0700 Meeting at 111B. Gameplan today includes the following.

Team 1 - SWMU 14 & 55 & 17

Team 2 - GC1, SA80, SWMU 62 Eagle Bay

Team 3 - SWMU 62 Eagle Bay DTW/insp. & Free product Recovery for another task order

QC items discussed include the following.

- Team 3 will check DTB for two SA80 wells (04-155 & 04-158) measured by Team 2 yesterday.. which were off ~ 3-5ft from 2011 & 2012 measurements.
- Team 2 questions accuracy of their DTW/DTB (different issue than above bullet). We will check their measurement equipment vs another team's.
- Be careful checking stabilization, criteria is not 10% for all parameters; be careful when team members switch roles - qc the tasks performed & any calculations

0800 Prepare trip blanks for today as applicable.

9/6/13

TO 66 ADAK LTM 2013 9/6/13

0930 Discuss weather forecast w/ Andy Decision made for Team 1 & QC to collect surface water, sediment & lower well sample at SWMU 61 this afternoon & do shoreline inspection.

1000 Tracked third shipment of coolers to lab, which was picked up by Barbie W (lab personnel) at 07:18 this morning.

Tracked shipment of equipment to Argus-Hazco. The shipment ~~is~~ SLW 9/6/13 arrived at Dallas Fort Worth.

1015 Assist teams preparing to switch ~~gear~~ SLW 9/6/13 gears & have ~~teams~~ SLW 9/6/13 sample at SWMU 61 to take advantage of good weather. Generate trip blanks. Team 3 will share Team 1 cooler w/ water trip blk for GRO, BTEX.

Teams 2 & 3 report that their respective sounders had measurements within 1/100 feet when checking Team 2 equipment at SA80 well SP4-3. Team 3 DTB for the two SA80 wells (04-155 & 04-158)

9/6/13

TO 66 ADAK LTM 2013 9/6/13

1015 CONT was ~~consistent with 2011 & 2012~~ obtained; see field forms for details SLW 9/6/13

The erroneous Team 2 measurement was apparently due to the sounder getting caught on the top of the well screen or side of the well. Team 3 DTB ~~will~~ may be used at the two locations. SLW 9/6/13

1205 ~~1130~~ SLW 9/6/13 At SWMU 61 to observe & assist with collection of samples (surface water & sediment) at NL-04.

1500 At SWMU 61 well 14-210 with Team 3. Well goes dry twice while purging. Check CMP for instruction, it is not clear how to proceed when well does not meet stabilization criteria & goes dry before 3 times well casing volume is purged. Well has historically been a slow recharger. Consult with Project Geologist Don Balmer. Don recommends letting the well sit overnight to recharge. Then, collect a field measurement and sample. Recharging after the well went dry will ensure

9/6/13

TO 66 ADAK LTM 2013 9/6/13

1500 CONT a valid sample as the well will ~~be~~ contain water from ground SLW 9/6/13 (not stagnant water from well).

We anticipate returning tomorrow, weather dependent.

1800 Back at unit 111B. Respond to various questions & find out what teams accomplished today

1900 Off for day.

9/6/13

TO 66 ADAK LTM 2013 9/7/13

0700 Meeting at 111B. Scheduled activities for today include the following.

Team 1: SWMU 14 and possibly Runway 5/23

Team 2: SWMU 62 Eagle Bay 19 inspections

Team 3: SWMU 61 and O&M for another task order

QC items discussed include brief discussion of Team 2 vs 3 DTW/DTB comparison; will wait until Monday when NTR is here to provide full update. Will need to generate a Sampling Deviation Form for SWMU 61 well 14-210.

John gives H&S briefing.

0945 Emailed lab (Greg Salata) to cancel analyses for SP4-3-2013 collected by Team 2 on 9/5/13 at 1050. Sample was recollected on 9/6/13

1000 Greg emails back to confirm cancellation of that sample. He indicates temps were fine for shipment received yesterday.

1015 Review field forms

[illegible] 9/7/13

TO 66 ADAK LTM 2013 9/7/13

1400 Review SWMU 61 14-210 field form & CMP SAP WS #17. It appears we met the intent of P82, 4th paragraph under "SAMPLE COLLECTION METHODS" in WS 17, which indicates a well with a prior history of slow recovery can be allowed to recharge & then a sample can be collected without attaining the stabilization criteria. Thus, it seems a Sampling Deviation Form is not necessary. Will discuss further with Don & Annette.

2330 Off for day

[illegible] 9/7/13

TO 66 ADAK LTM 2013 9/8/13

00:00 Figure out how many bottles are needed to collect remaining LTM samples. Perform bottle count. All OK, except we are two DRO bottles (1L amber w/ HCl) short. SLW 9/8/13 Will ask teams to check vans to see if there are any in circulation.

0230 ~~1430~~ Off for break.

SLW 9/8/13 08:30 Call Goldstreak to make reservation for shipment to lab, ~5 coolers.
AWB# 8289 6041

9.40 Email lab with AWB # and a heads up about limited volume (6 VOC vials) for SWMU 61 sample 14-210-2013, which needs GRO & BTEX analysis, plus MS/MSD for BTEX. We will designate 2 vials for GRO and 4 for BTEX w/ MS/MSD.

11:00 Team 2 has 4 DRO bottles in their van; thus, we have sufficient bottles for remaining samples

Shanna L Walk 9/8/13

TO 66 ADAK LTM 2013 9/8/13

1230 Inspect coolers prior to shipping. All OK.
Discuss whether Sampling Deviation Form should be generated for SWMU 61 14-210 with Don (Project Geologist). Don's opinion is that it is not necessary per SAP WS 17 as it indicates a sample would preferably be collected within 2 hours rather than overnight. It was determined that recharging overnight was necessary & would not have been safe to stay after dark.

1400 Off for day

9/8/13

Shanna L Walk

TO 66 ADAK LTM 2013 9/9/13

0700 Morning meeting at 111B. Planned activities include the following.

Team 1 - Roberts Landfill surface water

Team 2 - Eagle Bay sampling

Team 3 - Free product recovery for another task order & Roberts Landfill wells

QC items discussed are as follows.

- Verify correct analysis (GRO only) per FCR at SWMU 62 Eagle Bay well 03-502.
- For landfills, follow CMP LF SAP w/ stand-alone instructions (App B). See SAP WS #17 regarding special instructions that discuss slow-recharging A-3 well.
- Sufficient bottles remain, start using 5 VOC vials instead of 3 since this bottle type may freeze & break & our LTM activities are close to finishing
- Discuss Team 2 vs 3 DTW comparison (within 1/100 inch)

[signature] 9/9/13

TO 66 ADAK LTM 2013 9/9/13

0700 CONT - Discuss sampling wells slated for FD & MS/MSD asap in case we need to switch the QC samples to a new location

John gives S & H briefing

0800 - Prepare trip blanks for today's activities.

0815 - Receive email from lab indicating shipment received this morning, no temps were > 6°C, and there was one broken vial for 14-113-2013 from SWMU 61. The lab has 5 unbroken VOC vials, which is sufficient for BTEX & GRO analyses; they also have unbroken containers for DRO.

1200 Team 1 reports that surface water locations RLSW01 & RLSW02 at Roberts Landfill are dry & can't be sampled. Generate Sampling Deviation Form

1800 Discussion with Team 2 regarding field forms for SWMU 62 Eagle Bay. They inspected all wells on 9/7/13

[signature] 9/9/13

TO 66 ADAK LTM 2013 9/9/13

1800 CONT and recorded DTW. When doing the sampling today, they did not remeasure DTW. Don (project geologist) indicates the values from 9/7/13 are representative of today

2300 off for day

[signature] 9/9/13

TO 66 ADAK LTM 2013 9/10/13

0700 Meeting at 111B. Teams will perform the following LTM activities

Team 1: surface water at Roberts Landfill, sediment & surface water at SWMU 62, wells at SWMU 14 & 55

Team 2: SWMU 62, Sandy Cove well inspections (all) & sampling

Team 3: Roberts Landfill A-3 (difficult well, slow recharger), SWMU 62 shoreline inspection, support Team 2

QC activities discussed include the following.

- Update Steve (NTR) that we generated a SW 9/10/13 sampling deviation form for 2 surface water locations (SWMU 25, Roberts Landfill) that were dry & couldn't be sampled
- Gauge Roberts LF well A3 by 10:30 (within 24 hours of others)
- Take overview/vicinity pics at Roberts Landfill from well locations & SWMU 62 Eagle Bay & Sandy Cove

[signature] 9/10/13

TO 66 ADAK LTM 2013 9/10/13

0700 CONT
- Keep landfill samples on separate COC forms
- Discussed whether it was necessary to collect DTW measurements at time of sampling at SWMU 62 Eagle Bay; Appears there is no requirement to do so
- Discuss trip blanks to be generated today

0800 ~~Prepare~~ Wrap & label trip blanks for todays activities. SWM 9/10/13

1100 Andy calls to discuss SWMU 62 sediment location NL-09, which is downgradient of the recovery trench boom in East Canal. The historic sampling location is underwater.

1115 Call to discuss NL-09 with Annette. We will not collect sediment from underwater location; she says to collect along shoreline.

1130 Andy & Bob are back. As shown in last year's photos, it would be extremely difficult to collect sediment sample along current

9/10/13

TO 66 ADAK LTM 2013

1130 CONT shoreline, due to it being highly vegetative. Andy reports that the area around the pumps is dry; thus it wont be feasible to turn them on, perhaps. John allegedly saw sediment location yesterday and it was dry; it did not rain overnight.

1230 Went w/ Team 1 to look at pump location. Water level was high. Continued on to SWMU 62 Location NL-09. Verified it would be difficult to impossible to collect a sediment sample in the historic location due to vegetation & water level. Near Boom 8 there is some very contaminated (per visual inspection) sediment that is accessible.

1300 Back at housing units.

1345 Discuss SWMU 62 NL-09 location with Annette. Decision is to NOT collect a sediment near Boom 8, it is known to be contaminated & the intent is to evaluate downstream.

9/10/13

Signature by Andy

TO 66 ADAK LTM 2013 9/10/13

1345 CONT. Discussed SWMU 17 drum observed during well inspection, will send pics to Annette & cc Beth. Annette is OK about not repeating DTW at SWMU 62 Eagle Bay & Sandy Cove well locations if gauged & inspected & sampled on different days. Also, per conversation yesterday, Annette agrees no Sampling Deviation Form is necessary for SWMU 61 R4-210, which didn't meet stabilization criteria and we didn't collect 3 casing volumes, due to historic osiw w/ slow recharge.

1410 Sent SWMU 17 leaking drum photos to Annette w/ cc to Beth & Cara. Email does not send.

1500 Email SWMU 62 Roberts LF Sampling Deviation Form to Aaron (RPM) & Steve (NTR). Email does not send; will try later

2000 End of day [signature] 9/10/13

TO 66 ADAK LTM 2013 9/11/13

0800 Meeting at 111B. Gameplan is to finish SWMU 55 well, Sandy Cove sampling at 5 wells & SWMU 62 NL-09 surface water & sediment sampling if water has receded. Team 1 will take Steve (NTR) to sampling location to check out. QC items discussed include the following

- Trip blks - no new ones need generated
- No DTW necessary for SWMU 62 Sandy Cove since inspections were completed yesterday
- take pics at NL-09 for Aaron if planned sediment sample can not be collected
- Turn in COC forms today & get cooler count

1000 Field form review, office work

1400 Finally all emails in Outlook have sent, including one re. SWMU 17 drum.

1500 Review field forms and COC forms as teams return from field.

1800 Off for day [signature] 9/11/13

TO 66 ADAK LTM 2013 9/12/13

0900 Meeting at 111B. Discuss field & demob activities to perform today. John gives S&H briefing. QC items discussed include the following.

- remaining pictures (primarily site overview/vicinity) will be taken today or tomorrow
- remaining SWMU 62 NL09 sediment is slated for MS/MSD
- Cooler count is ~10 to 11
- Will double-check field forms to verify test kit results for all wells scheduled are recorded.

1000 Call Alaska Airlines to reserve Gold Streak shipment of samples. They say shipment is overbooked. Discuss w/ John. John calls a contact of his & they will pursue further. (Contact is surprised at the overbooked status. A body (human remains) is being transported off island today.)

1015 John reports that we can't pre-book Goldstreak, but we can Goldstreak ~~by~~ SLW 9/12/13 at Adak terminal at 13:00.

Shannon L Walsh 9/12/13

TO 66 ADAK LTM 2013 9/12/13

1030 Review COC forms vs. roadmap vs. official scope. Identify one discrepancy: COC form & roadmap indicate GRO & DRO at SWMU 62 Eagle Bay AMW-704; official scope tables 17-1 & 18-1 indicate DRO only at this location. Check TO55 AGWR & TO39 AGWR; GRO was discontinued per TO 39 AGWR. Call Annette to find out if GRO was added back after generation of official scope tables. She is on a ferry but says to rely on official scope & AGWR.

1100 Pull ~~Adak~~ sample aliquots of GRO for AMW-704-2013 out of cooler & discard (added to purge water for petroleum sites). Revise COC form.

1300 Support demob activities.

1700 End of day

Shannon L Walsh 9/12/13

TO 66 ADAK LTM 2013 9/13/13

0900 Meeting at 111B to discuss today's activities, which are primarily demob. Team 1 will try to collect SWMU 62 Eagle Bay NL-89 surface water and sediment prior to shipping samples on Sunday 9/14. As relayed by Annette to Sherri yesterday afternoon, Aaron was up to try to collect a surface water & sediment sample through Sunday morning. If water level is still too high, collect surface water sample only. S&H briefing by John.

1000 Assist w/ demob activities & remaining LTM tasks. Paperwork.

1700 Off for day

Shawn Lewis 9/13/13

TO 66 ADAK LTM 2013 9/14/13

0900 Meeting at 111B to discuss today's activities. S&H briefing by John.

1000 Assist w/ remaining LTM tasks & demob activities

1230 Break

2000 Review field forms & pictures for completion

2330 Off for day

Shawn Lewis 9/14/13

TO 66 ADAK LTM 2013 9/15/13

1015 Call Goldstreak to pre-book shipment of 2 coolers to lab.
AWB # 027 8178 9842

1030 Email lab w/ AWB #

1245 Call Alaska Airlines to pre-book the following shipments.
- 31 coolers (empty & unused bottles)
  AWB 8179 0015
  arrive 7:04 A.M. in Seattle for pickup by ALS
- 11 pieces (rental meters, sampling equipment) via GoldStreak
  AWB 8179 0052
  arrive in Dallas Ft Worth ~ 18:26 tomorrow

1315 Email vendors with shipment info & AWB #s.

2000 Prepare Contractor Production / QC Reports.

2100 John stops by to drop off HDS briefing forms. He informs me that the shipment of 31 coolers to the lab was bumped until Thurs 9/19/13.
SLW 9/15/13

2130 Email lab regarding 31 coolers being bumped.

2200 Email Contractor Production/QC Reports for 9/9/13 through 9/14/13.

2230 End of day.

Sherri Walsh 9/15/13

TO 66 ADAK LTM 2013 9/~~16~~17/13
SLW 9/17/13

0900 Meeting at 111B to discuss any remaining LTM & demob tasks. We will continue to monitor NL-09 location (SWMU 62 Eagle Bay) for possibility of collecting a sediment sample. Team 1 will take a closeup picture of NL-08; original photos were of location but no close-up sediment photo was taken at that time. John gives S&H briefing

10:00 2nd: Ride with Bob over to SWMU 2 Eagle Bay NL-09, where water level has risen & unable to collect a sediment sample
1st: Ride with Bob to Former Power Plant NL-08 to take missing closeup sediment picture.
Office work.

1700 End of day

9/17/13

Sherri Walsh

TO 66 ADAK LTM 2013 9/16/13

0900 Meeting at 111B to discuss demob continuation. S&H briefing by John

1000 Support demob tasks.

1700 End of day

LATE ENTRY

9/16/13

TO 66 ADAK LTM 2013 9/18/13

0900 Meeting at 111B to discuss demob. S&H briefing by John

1000 Continue to pack & demob

1015 Discuss with Annette our inability to collect sediment at SWMU 62 Eagle Bay location NL-09 & MS/MSD. Will order MS/MSD on other samples, even if holding times have expired. We will try to collect sample in October 2013 when Andy and/or John are on Adak for another project.

1045 Email to Greg at lab re MS/MSD requests for sediment.

1100 Continue to demob.

1400 Break

1800 Continue to demob

2400 Off for day

TO 66 ADAK LTM 2013 9/19/13

~1000 Call Alaska Airlines

- Goldstreak to Argus-Ha360
  4 items, ~85 lbs
  AWB# 8520 4965
- Priority to ALS Environmental
  12 items, ~150 lbs
  AWB# 8520 5002

1130 Andy emails vendors w/ tracking numbers.

1135 Pack & demob

1645 Leave for airport

No further entries

Shanni [illegible] 9/19/13

No Further Entries

[illegible] 12/8/13

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ALL-WEATHER

JOURNAL

№ 390N

TOGG ADOK LTM 2013

SSHO HIS OUA

Start: 8/23/13

End: 9/18/13

Phone #s

Andy	Cell	206-909-3093
Beth	"	360-930-4663
Bob	"	360-298-4872
Don	"	360-204-4478
Ellie	"	907-355-8623
John	"	907-572-9761
Steve	"	253-279-0212

Housing

Andy/Bob	Unit 111A	907-592-2181
Sheeri/Annette	111B	-2348
Barb/Ellie	111C	-2155
Don	167C	-2157
Steve/Aaron	103D	-2204
Barb/Carla		

Weather 907-592-8207 BF 12-19-13

Book # Health & Safety

Task Order: 66

Contract: N44255-09-D-4005

Project: ADAK LTM 2013

Navy Installation: Former Naval Complex, Adak, AK

Site Name: OUA

Start Date: 8-~~26~~ 23-13 ASF

End Date: 9/18/13

Book Assignment: H&S - Don Bacner
- John Nightstone
- Andy Lewis

Company: Seacoast Environmental Services ~~LLC~~ LLC

Address: 18743 Front St. NE, Ste 201
Poulsbo, WA. 98370

Phone: 360-930-3300

Reviewed By: [signature] TOM

Date Reviewed: 12-18-13

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6-33	8-26-13 through 9-18-13	

JSF
12-18-13

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ALL-WEATHER
JOURNAL
FIELD BOOK

Name JOHN HIGHSTONE
DON BALMER

Address

Phone

Project TO 66 ADAK CTM 2013
HW 5 LOG

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Left Page	Right Page	Polydura Cover	Fabrikold Cover
Lined	Lined	Item No. 390N	Item No. 390NF

JSF
12-18-13

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T066 ADAK LTM 2013 8-23-13

10⁰⁰ - RUN AND CALIBRATE (3) PHOCHECK 1000 AND (1) PHOCHECK 2000 PID EQUIPMENT. MODELS ARE AS FOLLOWS:

#1 - PHOCHECK + 1000: S# 10-01410, A# 1111980

#2 - PHOCHECK + 1000: S# 10-01411, A# 1111979

#3 - PHOCHECK + 1000: S# 08-01542, A# 1088743

#4 - PHOCHECK + 2000: S# 08-02458, A# 1095679

UNITS 1, 2, AND 3 CALIBRATED WITHIN PARAMETERS. UNIT 4 UNABLE TO CALIBRATE, REPLACEMENT PID TO BE SHIPPED TO ADAK ON 8-25-13. ONCE REPLACEMENT IS RECIEVED UNIT 4 WILL BE SHIPPED BACK TO VENDOR.

13³⁰ - AT 111B FOR SITE SPECIFIC HEALTH AND SAFETY ORIENTATION MEETING. ATTENDEES: A. LEWIS, J. HIGHSTONE, R. BOYD, S. WUNDERLICH, E. ROELOFS, B. SCHLIEGER, D. BALMER.

ITEMS DISCUSSED WERE AS FOLLOWS:

EARTHQUAKES, TSUNAMIS, WARNING ALARMS; MUSTER AREAS AND PROPER PROCEDURES.

WEATHER - WORK WIND LIMITS, ADVERSE CONDITIONS, PROPER CLOTHING AND GEAR, COLD | HEAT STRESS PROCEDURES.

VEHICLE SAFETY - WIND HAZARDS AND PROCEDURES, TRAFFIC CONCERNS, PINCH POINTS, VEHICLE EMERGENCY EQUIPMENT (FIRE EXTINGUISHERS, FIRST AID KITS, AND EYE WASH KITS.

Don Balmer 8/23/13 John Highstone 8-23-13

T066 ADAK LTM 2013 8-23-13

BIOLOGICAL | ENVIRONMENTAL HAZARDS: COW PARSNIPS IDENTIFICATION AND EFFECTS, RAT HANTI-VIRUS EFFECTS AND INFESTATIONS, AND PROPER HOUSE KEEPING GUIDELINES.

PHYSICAL HAZARDS: SLIPS, TRIPS, FALLS, HEAVY LIFTING, DEBRIS AROUND SITES AND ROADWAYS, BUNKER DOORS PINCH POINTS AND SLIPPERY FLOORING, ALLOW BUNKER TO VENT PRIOR TO ENTRY.

CHEMICAL HAZARDS: SAMPLING CHEMICALS, ALCONOX, GASOLINES, PETROLEUMS, BLEACH, GENERAL CLEANERS, AND MSDS'S.

MODIFIED LEVEL D PPE: STEEL TOE BOOTS, NITRILES, SAFETY GLASSES, SAFETY VESTS, FLOTATION VESTS AROUND WATER.

COMMUNICATIONS: CELL PHONES AND RADIOS

REVIEW UXO DVD AND DISCUSS ORDINANCE AND POMMEL STAKE CONCERNS.

REVIEW APP | SSHP CONTENTS

EMERGENCY PROCEDURES AND PROTOCOLS AND COMPLETE MEDICAL DATA SHEETS.

GENERAL SAFETY AND HEALTH POLICIES AND PROCEDURES, ACCIDENT REPORTING AND UNSAFE PRACTICES REPORTING. WASTE MANAGEMENT PROCEDURES.

Don Balmer 8/23/13 John Highstone 8-23-13

TO66 ADAK LTM 2013 8-23-13

1700 - ~~CONDUCT ADAK SITE AREAS MEETING~~
AREAS FOR EMERGENCIES JH 8/23/13

1700 - TOUR ADAK SAMPLING SITES, AND EMERGENCY LOCATIONS, SUCH AS ADAK MEDICAL CLINIC, TSUNAMI MUSTERING AREA, BUNKER LOCATION, AND LOCAL PLACES OF INTEREST.

1930 - AT UNIT FOR PAPERWORK.

2030 - END OF DAY

Don Balmer 8/23/13

John Highsmith 8-23-13

TO66 ADAK LTM 2013 8/24/13

1000 - AT 111B FOR HEALTH + SAFETY MEETING:
ATTENDEES: J. HIGHSMITH, A. LEWIS, R. BOYD, D. BALMER, S. WUNDERLICH, E. ROELOFS, B. SCHLEIGER, S. SKEEHAN.

ITEMS DISCUSSED: SLIPS, TRIPS, FALLS, WIND HAZARDS, CALIBRATING EQUIPMENT, SAMPLE HANDLING, PROPER PPE MODIFIED LEVEL D.

1330 - AT 111B FOR SAMPLING ORIENTATION. DISCUSS AND REVIEW CALIBRATING SAMPLING EQUIPMENT, SAMPLE HANDLING AND PACKAGING, PROPER PAPERWORK PROCEDURES, PROPER STORING OF MATERIALS AT BUNKER.

1600 - AT DIRTY BUNKER FOR ORGANIZING AND LABELING OF IDW DRUMS AND CONTAINERS.

1700 - END OF DAY

Don Balmer 8/24/13

John Highsmith 8-24-13

T066 ADAK LTM 2013 8-26-13

0700 - AT 111B FOR HEALTH AND SAFETY MEETING; ATTENDEES: JOHN HIGHSTONE, D. BALMER, R. BOYD, S. WUNDERLICH, A. LEWIS, B. SCHLEIGER, E. ROELOFS, A. FRANZEN, S. SKEEHAN. ITEMS DISCUSSED: SLIPS, TRIPS, FALLS, WIND HAZARDS, VEHICLE PROCEDURES FOR WELL SAMPLING, BUNKER HAZARDS, TEST KIT HAZARDS AND PROCEDURES, DEBRIS AROUND WELLS, PID TESTS AT WELL HEAD AND BREATHING ZONE.

1010 - AT FORMER POWER PLANT T-1451 FOR WELL SAMPLING. CONDUCT SITE SAFETY AND HAZARD ANALYSIS AROUND AREA. HAZARD INSPECTION COMPLETE.

2000 - END OF DAY

John Highstone
Don Balmer
8/26/13
8-26-13

T066 ADAK LTM 2013 8-27-13

0700 - AT 111B FOR HEALTH + SAFETY MEETING. ATTENDEES: J. HIGHSTONE, D. BALMER, A. LEWIS, A. FRANZEN, B. SCHLEIGER, S. WUNDERLICH, E. ROELOFS.

ITEMS DISCUSSED: SLIPS, TRIPS, FALLS, WIND HAZARDS: PARK INTO WIND, OPEN (1) DOOR AT A TIME, DEBRIS AROUND WELLS, VEHICLES AS WIND BLOCK IF POSSIBLE, BUNKER HAZARDS: BUNKER DOOR PINCH POINTS, ALLOW BUNKER TO VENT PRIOR TO ENTRY, BOTTLE | SAMPLE HANDLING, VEHICLE EMERGENCY EQUIPMENT, PROPER PPE MODIFIED LEVEL D: NITRILES, SAFETY GLASSES, SS BOOTS, VESTS, LIFE JACKETS AROUND WATERWAYS

WEATHER FORECAST: WIND WSW 14 - 30 mph, RAIN AM + EVENING, TEMP: HIGH 57

0945 - ON SITE AT FORMER POWER PLANT T-1451. CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE.

1900 - END OF DAY

John Highstone
Don Balmer
8/27/13

T066 ADAK LTM 2013 8-28-13

0700 - AT 111B FOR HEALTH + SAFETY MEETING.
ATTENDEES: J. HIGHSTONE, S. SKEEHAN, A. FRANZEN, B. SCHLEIGER, A. LEWIS, S. WUNDERLICH, R. BOYD, D. BALMER.
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS,
WIND HAZARDS: PARK INTO WIND IF POSSIBLE, OPEN DOORS CAUTIOUSLY ONE AT A TIME, DEBRIS AROUND WELLS;
VEHICLE SAFETY: ACCESS OFF ROADWAYS WELLS WITH CAUTION, WALK PATH TO WELL BEFORE DRIVING, ACCELERATE SLOWLY DUE TO HEAVY RAINFALL AND SOFT GROUNDS.
PROPER PPE MODIFIED LEVEL D: NITRILES SAFETY GLASSES, SS BOOTS, VESTS, LIFE JACKETS AROUND WATERWAYS.
COLD STRESS: MORNING NORTHERLY WINDS, TAKE BREAKS AS NEEDED.
WEATHER FORECAST: WIND: NNE 10-32 MPH GUSTS, MORNING CLOUDS AND RAIN, TEMP: HIGH 57, AM WINDCHILL FACTOR.
0745 - A. FRANZEN SITE ORIENTATION: VIEW UXO DUD, EARTHQUAKE AND TSUNAMI MUSTERING AND MEETING LOCATIONS, PLANS AND PROCEDURES.
[signature] / Don Balmer 8-28-13

T066 ADAK LTM 2013 8-28-13

0850 - ONSITE AT AREA 303. CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE.
1019 - ONSITE AT T-1251 FORMER POWER PLANT. CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE
1900 - END OF DAY

[signature] / Don Balmer 8-28-13

T0660 ADAK LTM 2013 8-29-13

0700 - AT 111B FOR HEALTH + SAFETY MEETING.
ATTENDEES: J. HIGHSTONE, D. BALMER, R. BOYD, E. ROELOF, S. WUNDERLICH, A. LEWIS, B. SCHLEIGER, A. FRANZEN, S. SKEEHAN.
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS,
WIND HAZARDS: PARK INTO THE WIND IF POSSIBLE, OPEN DOORS ONE AT A TIME, DEBRIS AROUND WELLS.
PROPER PPE MODIFIED LEVEL D: GLOVES, SAFETY GLASSES, SS BOOTS, VESTS.
HEAVY LIFTING: HEAVY COOLERS, BEND WITH KNEES WHEN LIFTING, USE BUDDY SYSTEM LIFTING COOLERS TO EASE OVER EXERTION.
TAKE BREAKS AS NEEDED DUE TO WEATHER.
WEATHER FORECAST: WIND: S 13-23 MPH GUSTS, OVERCAST AND CLOUDY, TEMP: HIGH 54°.
0829 - ONSITE AT AREA 303. CONDUCT SITE SAFETY AND HAZARD ANALYSIS.
HAZARD INSPECTION COMPLETE. HAZARD IDENTIFIED AT WELL MW-303-40: MILITARY FLAT BOARD NEXT TO WELL, ARRIVED FROM AIR FIELD DUE TO HIGH WINDS.
1900 - END OF DAY

Don Balmer [signature] 8-29-13

T0660 ADAK LTM 2013 8-30-13

0700 - AT 111B FOR HEALTH + SAFETY MEETING.
ATTENDEES: J. HIGHSTONE, D. BALMER, E. ROELOFS, S. WUNDERLICH, E. KERCHER, A. LEWIS, A. VERNIK, B. SCHLEIGER, C. ALFERNESS, A. FRANZEN, R. BOYD.
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS
WIND HAZARDS: PARK INTO WIND WHEN POSSIBLE, USE CAUTION WHEN OPENING DOORS, DEBRIS AROUND WELLS AND LANDFILLS.
PROPER PPE MODIFIED LEVEL D: NITRILES, SAFETY GLASSES, SS BOOTS, VESTS, LIFE VESTS AROUND WATER WAYS, LEATHER GLOVES FOR DRUM HANDLING.
BUNKERS: BUNKER DOOR PINCH POINTS, LOCK DOOR INTO PLACE, ALLOW TO VENT PRIOR TO ENTRY, USA ENVIROMENTAL BURNING EXCLUSION ZONE.
WEATHER FORECAST: WIND SW 11-24 MPH GUSTS, OVERCAST WITH SHOWERS THROUGHOUT THE DAY, HIGH 59.
0800 - B. KERCHER, C. ALFERNESS SITE ORIENTATION: VIEW UXO ADAK VIDEO, EARTHQUAKE AND TSUNAMI PREPAREDNESS, MUSTERING AND MEETING LOCATIONS, PLANS AND PROCEDURES.

[signature] | Don Balmer 8-30-13

T0660 ADAK LTM 2013 8-30-13

0726- Earthquake occurs - Magnitude 7.0, 94 km ESE of Adak, depth 20.8 mi. - No Tsunami Warning. Significant prolonged shaking felt in house.

0842 - ONSITE AT MW-303-30 (AREA 303). CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE.

1057 - ONSITE AT SWMU 60 TANK FARM A. CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE.

1507 - ONSITE AT GCI. CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE.

* HAZARDS IDENTIFIED: NUMEROUS PIECES OF SHEETMETAL IN FIELD BETWEEN WELLS, WELL 04-204: TRIP HAZARD - OLD COILED WIRE EMBEDDED IN GRASS SPOOLED AROUND (1) BOLLARD.

1900 - END OF DAY

Don Balmer 8/30/13 8-30-13

T0660 ADAK LTM 2013 8-31-13

0700 - AT IWB FOR HEALTH + SAFETY MEETING.

ATTENDEES: J. HIGHSTONE, D. BALMER, R. BOYD, E. ROELOFS, S. WUNDERLICH, C. KERCHER, A. LEWIS, A. VERNIK, B. SCHLEIGER, A. GRANZEN, C. ALFERNESS.

ITEMS DISCUSSED: SLIPS, TRIPS, FALLS, WATERWAYS HAZARDS: SLIPPERY SURFACES, ROCKY TERRAIN AROUND SHORELINES, OVERHEAD PIPING AT SWEEPER CREEK.

PROPER PPE MODIFIED LEVEL D: GLOVES, SAFETY GLASSES, SS BOOTS, VESTS, LIFE VESTS, HARD HATS.

EARTHQUAKE PREPAREDNESS, HOUSING ELECTRICAL HAZARDS, DRIVING/HIKING IN FOG CONDITIONS. SWMU60 ROADWAY COLVERT HAZARD.

WEATHER FORECAST: WIND: 17-27 MPH GUSTS, PERIODS OF RAIN, TEMP: HIGH 57°.

0807 - ONSITE AT SA79 FOR SHORELINE INSPECTION. CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE. HAZARDS IDENTIFIED ARE SHARP ROCKS AROUND SHORE LINE, METAL REBAR IN SHORELINE.

0825 - ON SITE AT SWMU 60 FOR SHORELINE INSPECTIONS, HAZARD INSPECTION COMPLETE. HAZARDS: METAL, REBAR, AND SHARP ROCKS

Don Balmer 8/31/13 8-31-13

T066 ADAK LTM 2013 8.31.13

0900 - ONSITE AT SOUTH OF RUNWAY FOR SHORELINE INSPECTIONS. HAZARD INSPECTION COMPLETE. HAZARDS IDENTIFIED: SHARP ROCKS, METAL, REBAR, BROKEN WOOD, AND MISC. DEBRIS.

1035 - ONSITE AT ~~SOUTH~~ NMCB FOR WELL INSPECTIONS. CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE. HAZARDS IDENTIFIED: WOOD, METAL, AND CONCRETE DEBRIS THROUGHOUT ENTIRE SITE.

1900 - END OF DAY

8.31.13

Dan Balmer 8/31/13

8.31.13

T066 ADAK LTM 2013 9-1-13

0800 - SAFETY AND HEALTH TAILGATE MEETING FOR IC TEAM: C. ALFORNESS, A. FRANZEN, B. KORCHER.

ITEMS DISCUSSED: SLIPS, TRIPS, FALLS, UNEVEN GROUNDS, CLIFFS, WIND HAZARDS, DRIVING CONDITIONS OFF ROADWAYS, UXO SAFETY AND AWARENESS, ABANDONDON BUILDING HAZARDS, THERMAL STRESS, PROPER PPE LEVEL D: STEEL TOE BOOTS, SAFETY VESTS, RAIN GEAR, GLOVES AS NEEDED.

1900 - END OF DAY FOR IC TEAM AND INSPECTIONS.

Dan Balmer 9/1/13

Eliz Rendon 9/1/13

9.1.13

9-2-13

TOGG ADAK LTM 2013 9-2-13

0700 - AT NMB FOR HEALTH AND SAFETY MEETING.
ATTENDEES: J. HIGHSTONE, R. BOYD, B. SCHLEIGER, A. LEWIS, S. WUNDERLICH, D. BALMER, E. ROELOFS.
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS, PROPER PPE MODIFIED LEVEL D: NITRILES, LEATHER GLOVES, STEEL TOE BOOTS, SAFETY GLASSES, SAFETY VESTS, LIFE JACKETS, POWER OUTAGES AND EMERGENCY PREPAREDNESS, WATERWAYS HAZARDS.
WEATHER: WINDS: WNW 19-31 MPH GUSTS, SHOWERS THROUGHOUT DAY. TEMP: HIGH 52°
1440 - ONSITE AT TANKER SHED. CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE. HAZARDS IDENTIFIED: NUMEROUS SMALL METAL DEBRIS AND METAL PROTRUSIONS THROUGHOUT SITE.
1900 - END OF DAY

9.2.13

TOGG ADAK LTM 2013 9-2-13

0700 - AT NMB FOR HEALTH AND SAFETY MEETING.
ATTENDEES: J. HIGHSTONE, R. BOYD, B. SCHLEIGER, A. LEWIS, S. WUNDERLICH, D. BALMER, E. ROELOFS.
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS, PROPER PPE MODIFIED LEVEL D: NITRILES, LEATHER GLOVES, STEEL TOE BOOTS, SAFETY GLASSES, SAFETY VESTS, LIFE JACKETS, POWER OUTAGES AND EMERGENCY PREPAREDNESS, WATERWAYS HAZARDS.
WEATHER FORECAST: WINDS WNW 19-31 MPH GUSTS, SHOWERS THROUGHOUT DAY, HIGH 52°, WIND CHILL IN AM.
0831 - ON SITE AT NMCB FOR SHORELINE SOIL SAMPLING. CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE. HAZARDS IDENTIFIED: ROCKY SHORELINE AROUND SAMPLE LOCATION, METAL PROTRUSIONS IN VICINITY, SLIPPERY SURFACES, SHARP CUTTING SURFACES ON ROCKS AND BARNACLES.
1200 - END OF DAY

Don Balmer 9/2/13

9.2.13

T066 ADAK LTM 2013 9-3-13

0700 - AT 111B FOR HEALTH AND SAFETY MEETING.
ATTENDEES: J. HIGHSTONE, A. VERNIK, R. BOYD, C. ALFORNESS, B. SCHLEIGER, A. LEWIS, S. WUNDERLICH, E. KERCHER, E. ROELOFS, D. BALMER.
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS, PROPER PPE MODIFIED LEVEL D: NITRILES, SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS, LIFE JACKETS, WATERWAYS HAZARDS, PRODUCT HANDLING, WIND HAZARDS, COLD STRESS.
1440 - ON SITE AT TANKER SHED. CONDUCT SITE SAFETY AND HAZARD ANALYSIS. HAZARD INSPECTION COMPLETE. HAZARDS IDENTIFIED: NUMEROUS METALS AND DEBRIS AROUND SITE. METAL PROTRUSIONS AND CONCRETE DEBRIS.
1900 - END OF DAY

Don Balmer 9/3/13 9-3-13

T066 ADAK LTM 2013 9-4-13

0700 - AT 111B FOR HEALTH AND ~~SAFETY MEETING~~.
ATTENDEES: ~~SLIPS, TRIPS, FALLS~~ 9-4-13
J. HEGHSTONE, D. BALMER, R. BOYD, E. ROELOFS, S. WUNDERLICH, A. LEWIS, B. SCHLEIGER, A. VERNIK, E. KERCHER, C. ALFORNESS.
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS.
PROPER PPE MODIFIED LEVEL D: NITRILES, LEATHER GLOVES, SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS, LIFE JACKETS.
SHORELINE HAZARDS, COLD STRESS - TAKE BREAKS AS NEEDED, EARTHQUAKE PREPAREDNESS, PRODUCT HANDLING, STAY UPWIND AT WELLS.
BUNKER HAZARDS: ALLOW BUNKER TO VENT PRIOR TO ENTRY, BUNKER DOOR PINCH POINTS.
WEATHER FORECAST: WIND - NNW 11-22 MPH, CLOUDY WITH SHOWERS IN MORNING, PARTLY SUNNY IN AFTERNOON, TEMP: 54°
1010 - ON SITE AT NMCB FOR SHORELINE INSPECTION. HAZARD INSPECTION COMPLETE. HAZARDS IDENTIFIED: SHARP ROCKS, SLIPPERY SURFACES, WOOD DEBRIS, UNEVEN TERRAIN.
1900 - END OF DAY

Don Balmer 9/4/13 9-4-13

T066 ADAK LTM 2013 9-5-13

0700 - AT 1113 FOR HEALTH AND SAFETY MEETING
ATTENDEES: J. HIGHSTONE, A. VERNIK, E. KORCHER, B. SCHLEIGER, C. ALFERNESS, A. LEWIS, R. BOYD, S. WUNDERLICH, D. BALMER, E. ROELOFS.
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS, PROPER PPE MODIFIED LEVEL D: GLOVES, SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS. TRAFFIC HAZARDS: MORE VEHICLES ON ROADWAYS DUE TO TOURISM, EXTRA ATTENTION TO OTHER DRIVERS, UPWIND AT WELLS, PRODUCT HANDLING, BUNKER HAZARDS; ALLOW BUNKER TO VENT PRIOR TO ENTRY, BUNKER DOOR PINCH POINTS. HEAVY LIFTING
WEATHER FORECAST: WIND: 9-15 MPH, MOSTLY SUNNY WITH POSSIBLE AFTERNOON SHOWERS, HIGH 52°
0949 - ON SITE AT GCI FOR WELL SAMPLING. HAZARD INSPECTION COMPLETE. HAZARDS IDENTIFIED: LOOSE METAL ON SATELITE DISH, METAL DEBRIS ON SITE IN FIELD AREA.
1900 - END OF DAY

Don Balmer 9/5/13 9-5-13

T066 ADAK LTM 2013 9-6-13

0700 - AT 1113 FOR HEALTH AND SAFETY MEETING.
ATTENDEES: J. HIGHSTONE, S. SKEEHAN, B. SCHLEIGER, R. BOYD, A. LEWIS, S. WUNDERLICH, E. ROELOFS, D. BALMER
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS
PROPER PPE MODIFIED LEVEL D: GLOVES, SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS, LIFE JACKETS AROUND WATERWAYS. PRODUCT HANDLING, UPWIND AT WELLS, BUNKER HAZARDS, LOCK DOOR IN PLACE, ALLOW TO VENT PRIOR TO ENTRY, BUNKER DOOR PINCH POINTS, HEAVY BACKPACKS AND UNEVEN GROUNDS AND TERRAIN.
WEATHER FORECAST: WIND SSE 9-18 MPH, CLOUDY WITH SHOWERS IN AFTERNOON, TEMP: HIGH 51°.
0853 - ONSITE AT SA80 STEAMPLANT. HAZARD INSPECTION COMPLETE.
1221 - ONSITE AT SWMU 61. HAZARD INSPECTION COMPLETE FOR SAMPLING. HAZARDS IDENTIFIED: UNEVEN TERRAIN, HOLES AND DIVOTS IN TUNDRA.
1900 - END OF DAY

Don Balmer 9/6/13 9-6-13

T066 ADAK LTM 2013 9-7-13

0700 - AT 111B FOR HEALTH AND SAFETY MEETING.
ATTENDEES: J. HIGHSTONE, D. BALMER, E. ROELOFS, S. WUNDERLICH, A. LEWIS, R. BOYD, B. SCHLEIGER
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS
PROPER PPE MODIFIED LEVEL D: GLOVES, SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS.
HIGH WIND HAZARDS: PARK INTO WIND, OPEN DOORS ONE AT A TIME, DEBRIS AROUND WELLS.
STAY UPWIND OF WELLS, HANDLE WELLS WITH PRODUCT CAUTIOUSLY, ALLOW BUNKER TO VENT PRIOR TO ENTRY, LOCK BUNKER DOOR INTO PLACE, BUNKER DOOR PINCH POINTS.
0855 - AT SWMU 61 FOR WELL SAMPLING.
HAZARD INSPECTION COMPLETE.
HAZARDS IDENTIFIED: UNEVEN GROUNDS, HOLES AND DIVOTS IN TERRAIN, SLIPPERY SURFACES, BACK PACKING EQUIPMENT TO SITE.
1300 - END OF DAY

Don Balmer 9-7-13
9/7/13

T066 ADAK LTM 2013 9-9-13

0700 - AT 111B FOR HEALTH AND SAFETY MEETING
ATTENDEES: J. HIGHSTONE, S. SKEEHAN, B. SCHLEIGER, R. BOYD, A. LEWIS, S. WUNDERLICH, E. ROELOFS, D. BALMER.
ITEMS DISCUSSED: SLIPS, TRIPS, FALLS, PROPER PPE MODIFIED LEVEL D: GLOVES SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS.
4 GAS METER USE AT ROBERTS LANDFILL WELLS, COLD STRESS IN "AM", TAKE BREAKS AS NEEDED. PRODUCT HANDLING, UPWIND AT WELLS, BUNKER DOOR PINCH POINTS, ALLOW BUNKER DOOR TO LOCK IN PLACE AND VENT PRIOR TO ENTRY.
WEATHER FORECAST: PARTLY CLOUDY WITH SUN BREAKS THROUGHOUT THE DAY. WINDS- W 7-14 mph, HIGH 52°
1030 - ONSITE AT ROBERTS LANDFILL FOR WELL SAMPLING. HAZARD INSPECTION COMPLETE. HAZARDS IDENTIFIED: CROSSING BARB WIRE FENCE TO GET TO WELL, SLOPED TERRAIN, WET AND TALL GRASS, UNEVEN GROUNDS, HOLES AND DIVOTS.
1900 - END OF DAY

Don Balmer 9-9-13
9/9/13

T066 ADAK LTM 2013 9-10-13

0700 - AT 111B FOR HEALTH AND SAFETY MEETING.
ATTENDEES: J. HIGHSTONE, S. SKEEHAN, R. BOYD, B. SCHLEIGER, A. LEWIS, S. WUNDERLICH, D. BALMER, E. ROELOFS.
TOPICS DISCUSSED: SLIPS, TRIPS, FALLS, PROPER PPE MODIFIED LEVEL D: NITRILES, LEATHER GLOVES, SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS, HEAVY LIFTING AND COOLER HANDLING, BUNKER DOOR PINCH POINTS, ALLOW BUNKER TO VENT PRIOR TO ENTRY, LIFE VESTS AROUND WATERWAYS.
WEATHER FORECAST - WINDS SSE 13-24 MPH, CLOUDY, HIGH TEMP 52°
0747 - ENSURE PROPER OPERATION OF (4) GAS METER FOR SAMPLING WELLS AT ROBERTS LANDFILL
0830 - ONSITE AT SWMU 25 ROBERTS LANDFILL FOR WELL SAMPLING. HAZARD INSPECTION COMPLETE, HAZARDS IDENTIFIED: UNEVEN TERRAIN, WASHED OUT ROADWAY GOING TO WELL A-3 (VEHICLE HAZARD), METAL PIPING DEBRIS STICKING OUT OF GROUND NEAR A-3 WELL LOCATION, HOLES AND DIVETS IN GROUND APPROACHING WELL LOCATION.

[signature] 9-10-13 Don Balmer 9/10/13

T066 ADAK LTM 2013 9-10-13

1050 - ON SITE AT SWMU 62 EAGLE BAY FOR SHORELINE INSPECTION. HAZARD INSPECTION COMPLETE: HAZARDS IDENTIFIED: TALL GRASS, HOLES AND DIVETS, SLIPPERY SHORELINE AREAS, UNEVEN TERRAIN, SLICK PETROLEUM SURFACES.
1900 - END OF DAY

[signature] 9-10-13
Don Balmer 9/10/13

T066 ADAK LTM 2013 9-11-13

0700 - AT 1113 FOR HEALTH AND SAFETY MEETING.
ATTENDEES: J. HIGHSTONE, S. SKEEHAN, E. ROELOFS, R. BOYD, S. WUNDERLICH, A. LEWIS, D. BALMER, B. SCHLEIGER.
TOPICS DISCUSSED - SLIPS, TRIPS, FALLS WIND HAZARDS - PARK INTO WIND, OPEN DOORS ONE AT A TIME, PROPER PPE MODIFIED LEVEL D - GLOVES, SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS, BUNKER DOOR PINCH POINTS, LOCK DOOR INTO PLACE AFTER OPENING, ALLOW TO VENT PRIOR TO ENTRY, COLD STRESS, TAKE BREAKS AS NEEDED.
WEATHER FORECAST - NW WINDS 27-42 MPH, CLOUDY | RAIN, HIGH TEMP 51°.
0928 - ONSITE AT SWMU 2 SANDY COVE FOR WELL SAMPLING. HAZARD INSPECTION COMPLETE. HAZARDS IDENTIFIED - HOLES AND DIVETS AROUND WELLS.
BHI - AT BUNKER FOR LTM MAINTENANCE - EMPTY PURGE WATER DRUM USING PROPER LIFTING AND PPE, PACK RECYCLE GLASS FROM SAMPLING USING PROPER PPE.
1900 - END OF DAY

Don Balmer 9/11/13 9-11-13

T066 ADAK LTM 2013 9-12-13

0700 - AT 1113 FOR HEALTH AND SAFETY MEETING.
ATTENDEES - J. HIGHSTONE, E. ROELOFS, D. BALMER, S. WUNDERLICH, A. LEWIS, R. BOYD, B. SCHLIEGER
TOPICS DISCUSSED - SLIPS, TRIPS, FALLS. PACKING AND LIFTING COOLERS PROPERLY, PROPER PPE MODIFIED LEVEL D - GLOVES, SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS, BUNKER DOOR PINCH POINTS, LOCK DOOR INTO PLACE, ALLOW BUNKER TO VENT PRIOR TO ENTRY. HOUSING BREAKINS - LOCK AND SECURE DOORS AT NIGHT. TEST KIT HANDLING.
WEATHER FORECAST - WINDS NW 16-34 MPH, PARTLY CLOUDY IN AM, MOSTLY SUNNY IN AFTERNOON, HIGH TEMP 54°.
1200 - END OF DAY FOR SSHO.

D. Balmer 9/12/13 9-12-13

T066 ADAK LTM 2013 9-13-13

0900 - ONSITE AT 1113 FOR HEALTH AND SAFETY MEETING. ATTENDEES - J. HIGHSTONE, E. ROELOFS, D. BALMER, S. WONDERLICH, A. LEWIS, R. BOYD, B. SCHLEIGER, S. SKEEHAN.

TOPICS DISCUSSED - SLIPS, TRIPS, FALLS, PROPER PPE MODIFIED LEVEL D - GLOVES SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS, BUNKER DOOR PINCH POINTS, ALLOW BUNKER TO VENT PRIOR TO ENTRY, THERMAL STRESSES, COLD STRESS IN AM, POSSIBLE HEAT STRESSES IN AFTERNOON.

WEATHER FORECAST - WINDS WSW 8-16 MPH, MOSTLY SUNNY, HIGH TEMP 54°.

1430 - END OF DAY

D. John Balmer 9/13/13

9-13-13

T066 ADAK LTM 2013 9-14-13

0900 - AT 1113 FOR HEALTH AND SAFETY MEETING. ATTENDEES - J. HIGHSTONE, B. SCHLEIGER, S. WONDERLICH, D. BALMER, E. ROELOFS, A. LEWIS, R. BOYD.

TOPICS DISCUSSED - SLIPS, TRIPS, FALLS, PROPER PPE MODIFIED LEVEL D - GLOVES, SAFETY GLASSES, STEEL TOE BOOTS, SAFETY VESTS, LIFE JACKETS AROUND WATERWAYS, PROPER LIFTING TECHNIQUES, BUNKER DOOR PINCH POINTS, LOCK BUNKER DOOR INTO PLACE AFTER OPENING, ALLOW BUNKER TO VENT PRIOR TO ENTRY.

WEATHER FORECAST - ~~24~~ WINDS SSW 9-16 MPH, PARTLY CLOUDY, HIGH TEMP 53°

0945 - AT BUNKER FOR PURGE WATER SAMPLING. ENSURE PROPER PPE IS DONNED, TWO PROPER SAMPLING PROCEDURES FOLLOWED.

1300 - END OF DAY

D. John Balmer 9/14/13

9-14-13

T066 ADAK LTM 2013 9-15-13

0900 - TAILGATE SAFETY MEETING - A. LEWIS, R. BOYD. TOPICS DISCUSSED - SLIPS, TRIPS, FALLS, PINCH POINTS, PROPER PPE MODIFIED LEVEL D: NITRILES, SAFETY GLASSES, STEEL TOE BOOTS, LIFE VESTS ALONG WATERWAYS, COMMUNICATIONS, HEAVY BUNKER DOORS, VENT BUNKER, BOTTLE HANDLING, COLD STRESS, TAKE BREAKS AS NEEDED, TRAFFIC HAZARDS.

WEATHER FORECAST - OVERCAST TO PARTLY SUNNY, NORTH WINDS, HIGH TEMP 52°

1200 - END OF DAY

Don Balmer 9/15/13

9-15-13

T066 ADAK LTM 2013 9-16-13

0900 - AT 111B FOR HEALTH AND SAFETY MEETING. ATTENDEES - J. HIGHSTONE, S. WUNDERLICH, D. BALMER, A. LEWIS, R. BOYD. TOPICS DISCUSSED - SLIPS, TRIPS, FALLS, BUNKER DOOR PINCH POINTS, LOCK BUNKER DOOR TO OPEN POSITION, ALLOW BUNKER TO VENT PRIOR TO ENTRY, HEAVY LIFTING PROCEDURES AND DRUM HANDLING, SMART ASH BURNER HAZARDS AND PROCEDURES, PROPER PPE MODIFIED LEVEL D, FIRE EXTINGUISHER HANDLING AND OPERATIONS.

WEATHER FORECAST - SW WINDS 11 mph IN MORNING AND AFTERNOON, 38 mph WINDS IN EVENING, CLOUDY WITH EVENING RAIN, HIGH TEMP 53°.

1200 - END OF DAY

Don Balmer 9/16/13

9-16-13

T066 ADAK LTM 2013 9-17-13

0900 - AT IIIB FOR HEALTH AND SAFETY MEETING.
ATTENDEES - J. HIGHSTONE, R. BOYD, A. LEWIS, S. WUNDERLICH, D. BALMER

TOPICS DISCUSSED - SLIPS, TRIPS, FALLS, CONNEX DOORS PINCH POINTS, HEAVY LIFTING HAZARDS AND PROCEDURES, BUNKER DOOR PINCH POINTS, ALLOW BUNKER TO VENT PRIOR TO ENTRY, DEMOBE PROCEDURES FOR EQUIPMENT AND SUPPLIES, PROPER PPE MODIFIED LEVEL D AS NEEDED FOR DEMOBE PROCEDURES AND WHEN IN THE FIELD.

WEATHER FORECAST - WINDS S 9-16 mph, PARTLY CLOUDY WITH POSSIBLE SHOWERS, HIGH TEMP 56°.

1730 - END OF DAY

Don Balmer 9/17/13 9-17-13

T066 ADAK LTM 2013 9-18-13

0900 - AT IIIB FOR HEALTH AND SAFETY MEETING.
ATTENDEES - J. HIGHSTONE, R. BOYD, A. LEWIS, S. WUNDERLICH, D. BALMER

TOPICS DISCUSSED - SLIPS, TRIPS, FALLS, PACKING AND HEAVY LIFTING, BUNKER DOOR PINCH POINTS, ALLOW BUNKER TO VENT PRIOR TO ENTRY, LOCK DOOR OPEN, PROPER PPE AS NEEDED WHILE DEMOBING.

WEATHER FORECAST - WEST WINDS 8-20 mph, FOG IN AM, MOSTLY SUNNY REST OF DAY, HIGH TEMP 58°.

1600 - END OF DAY

Don Balmer 9/18/13 9-18-13

No Further Entries

Don Balcer

9/18/13

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T066 AdaK LTM 2013 TEAM1

T066 AdaK LTM 2013
TEAM1 OUA
Start: 8/23/13
End: 9/18/13

Book #1 - Team 1
Project: Adak LTM 2013
Contract # N44255-09-D-4005
Task Order # 66
Navy Installation: Former Naval Complex Adak, AK

Site Name: OU A
Start Date: 8/23/13
End Date: 9/18/13
Book Assignment: Team 1
Andy Lewis
Robert Boyd
Company: Sealaska Environmental Services
Address: 18743 Front St. NE, Ste. 201
Poulsbo, WA 98370
Phone #: 360.930.3300

Reviewed by: [illegible]
Date Reviewed: 12-18-13

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RB 9/15/13

Remarked 9/18/13

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	PID - Ion Photocheck ION/PC-PLUS-1000EX	
	#1111980 (Asset #)	
	#10-01410	
	Pump - Pegasus Peristaltic Pump	
	Peg/Alexis Peri Pump #1134847 (Asset#)	
	Multimeter - Horiba Water Quality Monitor	
	Model #U-53 HSG# P2FRFJ23	
	-Auto Cal Solution Lot# 10306	
	Exp: 04-22-2014	
	4-Gas Meter - Rae Systems QRAE II	
	RAE/QRAE2P #1128035 (Asset#)	
	Interface Meter - Solinst Interface Probe	
	Model 122, #1088386 (Asset#)	

Robert Boyd 9/18/13

Rite in the Rain
ALL-WEATHER WRITING PAPER

ALL-WEATHER
JOURNAL
FIELD BOOK

Name Team 1
Andy Lewis, Robert Boyd

Address

Phone

Project TO 66 Adak LTM 2013

Rite in the Rain — A patented, environmentally responsible, all-weather writing paper that sheds water and enables you to write anywhere, in any weather. Using a pencil or all-weather pen, *Rite in the Rain* ensures that your notes survive the rigors of the field, regardless of the conditions.

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Lined	Lined	Item No. 390N	Item No. 390NF

RiteintheRain.com

Robert Boyd 9/18/13

T066 Adak LTM 2013 8/23/13

0800 - See SSHO logbook for Health & Safety.
Begin equipment check.

- Horiba U-52 - 1117978 Cal
  pH - 4.00 Temp - 17.81°C
  SC - 4.50 mS/cm Sal - 0.24%
  Turb - 0.0 NTUs ORP - 266 mV
  DO - 9.90 mg/L HSG # VF4PBJ66
- Horiba U-53 - 1138214 Cal
  pH - 3.99 Temp - 16.79°C
  SC - 4.50 mS/cm Sal - 0.24%
  Turb - 0.0 ORP - 249 mV
  DO - 9.42 mg/L HSG # P2FRFJ23
- Horiba U-52 - 1120873 Cal
  pH - 4.00 Temp - 17.11°C
  SC - 4.50 mS/cm Sal - 0.24%
  Turb - 0.0 NTUs ORP - 286 mV
  DO - 11.08 mg/L HSG # R3VYGRUY
- Horiba U-22 - 1088904
  pH - 3.99 Temp - 17.66°C
  SC - 4.50 mS/cm Sal - 0.2%
  Turb - 0.0 NTUs ORP - 242 mV
  DO - 7.33 mg/L Mfg # 7113002

1100 - Health & Safety Review (APP/SSHP), Site Orientation

Ralph Bond 8/23/13

T066 Adak LTM 2013 8/23/13

1900 - Site prep
2100 - End of day

Ralph Bond 8/23/13

T0606 Adak LTM 2013 8/24/13

0900 - Continue Site Prep
See SSHO Logbook for Health & Safety. Work plan review & equipment review (Horibas & PIDs). Review roadmaps, field forms, & sample packing procedures. Begin sample van prep.

1800 - End of day

Robert Bred 8/24/13

T0606 Adak LTM 2013 8/25/13

1800 - Receive equipment order from Angus-Hazco.

- U-52 Horiba #0000852
  HSG# DJUH50TW
  During Auto Cal error message received.
  "Zero calibration error - Zero calibration not possible Parameter = Turb"
- Ion Photo check PID
  Asset # 1111981
  # 10-01412
  Bump test = 102 ppm

1900 - End of day

Robert Bred 8/25/13

TO66 AdaK LTM 2013 8/26/13

0700 - On site office meeting
Conduct tailgate Health & Safety
See SSHO logbook.
Topics include: Proper PPE (AA RB 8/26/13
- Wind awareness / safety
- PID (Breathing zone / well head)
- UXO Awareness

0815 - Mob for Sampling
- PID Bump Test - 100 ppm
- Horiba Calibration

Time	pH	SC mS/cm	Turb NTU	DO mg/L	Temp °C	Sal %	ORP mV
0840	4.00	4.50	0.0	10.09	15.49	0.24	295
1515	4.00	3.70	0.0	9.57	16.38	0.20	231
1915	3.98	4.39	0.0	9.05	13.71	0.21	171

1040 - A. Lewis, R. Boyd on site
MW-1451-1 (Former Power Plant, Building T-1451). PID
Breathing Zone: 0.0 ppm, well head: 0.4 ppm.
Weather: 55°F, Partial Sun, 5 mph wind S

1100 - Remove sock. Collect [DTW = 6.51 ft btoc]

1200 - Set flow rate: ~~500~~ 400 mL/min via peristaltic RB 8/26/13

1206 - Collect water quality parameters listed on water sampling log.

1221 - Parameters stabilize. Purge 1.5 g.
pH - 6.34, SC - 0.431 mS/cm, Turb - 2 NTUs,
Robert Boyd 8/26/13

TO66 AdaK LTM 2013 8/26/13

1221 cont...
DO - 0.00 mg/L, Temp - 10.14°C,
Sal - 0.02%, ORP - -75 mV.
Light smell of petroleum

1230 - Collect sample MW-1451-1-2013
- 2 - 1 L amber w/HCl (DRO AK102)
- 1 - 500 mL poly u/p Alkalinity (SM2320B) & Sulfate (300.0)
- 3 - 40 mL amber VOA w/HCl Methane (RSK175)

Test Kit Results		
DO (ppm)	Fe^{2+} (ppm)	CO_2 (ppm)
0	8	100

Also complete Monitoring Well Gauging Visual Inspection Checklist.
Collect DTB = 15.15 ft btoc. Loose bollards.

1400 - On site office. Call Argus-Hazco to trouble shoot Horiba.

1610 - A. Lewis & R. Boyd on site
MW-1451-7 (Former Power Plant, Building T-1451). PID Breathing Zone: 0.0 ppm.
Collect [DTW = 6.96 ft btoc] PID well head: 0.2 ppm
DTP = 6.46 ft btoc, PT = 0.5 ft.
Recovered 380 mL product.
Did not collect sample.
Robert Boyd 8/26/13

1610 cont...

MW-1451-7-2013 due to PT > 0.02 ft (PT = 0.5 ft) as per WS#17 of SAP & Stand-Alone Specific Instruction #9, notified S. Wunderlich

Completed Monitoring Well Gauging Visual Inspection Checklist. Loose bollards

Moderate smell of petroleum.

50°F, rain, 5 mph wind S

1715 - A. Lewis & R. Boyd on site

E-701 (Former Power Plant, Building T-1451).

Collect [DTW = 18.42 ft btoc]

PID Breathing Zone: 0.0ppm, Wellhead: 0.0ppm.

Complete Monitoring Well Gauging Visual Inspection Checklist:

DTB = 24.26 ft btoc, no bollards

1735 - A. Lewis & R. Boyd on site

NL-08 (Former Power Plant, Building T-1451).

50°F, rain, 5 mph wind S.

Light sheen on surface of sediment. Seep appears to have migrated south past Boom 11. or expanded

R. Boyd 8/26/13

1740 - Collect sediment sample

NL-08S-2013

- 2-8oz amber w/p DRO (AK102)

EB 8/26/13 ~~1745~~ 2-methylnapthalene & phenanthrene (8270D SIM)

1750 - Collect sediment sample

NL-18S-2013 (Dup)

- 2-8oz amber w/p 2-methylnapthalene & phenanthrene.

1635 - On site 111A to de-mob, transfer samples to overnight storage, QC paperwork.

1920 - Former Power Plant, Building T-1451 Photo Log

Date	Time	Description
8/26/13	1423	MW-1451-1 facing east
8/26/13	1648	MW-1451-7 facing west
8/26/13	1808	NL-08 (Seal location) facing east
8/26/13	1808	NL-08 (Seal location) Close-up

1930 - End of day

R. Boyd 8/26/13

TOdo Adak LTM 2013 8/27/13

0630 - Trouble shoot Team 3 Horiba

0700 - On site office.
Conduct tailgate health & safety
See SSHO Logbook.
Topics include:
- Proper PPE
- Wind awareness
- slips, trips, & falls

Discuss work plan

0830 - Mob sample van.
- PID bump test = 100ppm
- Horiba Calibration Check 4.39

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0910	3.99	~~2.48~~ 4.37	0.0	9.24	16.95	0.21	268
1245	4.00	4.44	0.0	9.87	17.05	0.20	247
1850	3.98	4.47	0.0	9.22	13.41	0.20	248

0925 - Perform ORP manual calibration on Team 3 Horiba at 229 mV, manual temp calibration at 17.68°C. Conductivity reading 3.19 mS/cm, should read ~4.50 mS/cm in auto cal solution. Will not use Team 3 Horiba.

Rahmtzed 8/27/13

TOdo Adak LTM 2013 8/27/13

0950 - A. Lewis & R. Boyd onsite
E-701 (Former Power Plant, Building T-1451)
PID Breathing Zone: 0.0ppm
wellhead: 0.0 ppm.
Weather: 58°F, 15 mph wind S

1010 - Collect [DTW = 18.43 ft btoc]

1012 - Set flow rate 400mL/min via peristaltic pump.

1017 - Collect water quality parameters listed on water sampling log.

1029 - Parameters stabilize:
Purge 1.5 gal, pH - 6.33, SC - 0.108 mS/cm, Turb - 1 NTUs, DO - 5.92 mg/L, Temp - 12.03°, Sal - 0.00%, ORP - 207 mV. No odor, clear water.

1040 - Collect sample E-701-2013 (MS/MSD)
- 3 - 500mL poly w/p Alkalinity (SM2320B) Sulfate (300.0)
- 9 - 40mL amber VOA w/HCl Methane (RSK175)

Test Kit Results		
DO ppm	Fe^{2+} ppm	CO_2 ppm
5	0	11

Monitoring Well Gauging Visual Inspection Checklist completed 8/26/13.

Rahmtzed 8/27/13

TO66 Adak LTM 2013 8/27/13

1135 - A. Lewis & R. Boyd on site
NL-08 (Former Power Plant, Building T-1451)
Weather: 58°F, 20 mph wind S,
1140 - Collect surface water quality parameters: pH - 6.84, SC - 0.905 mS/cm, Turb - 26 NTUs, DO - 8.41 mg/L, Temp - 12.67°C, Sal - 0.0%, ORP - -21 mV.
Light smell of petroleum.
1145 - Collect surface water sample
NL-08-2013
- 3-40mL amber VOA w/HCl BTEX (8260C)
- 2-1L amber w/HCl DRO (AK102)
- 2-1L amber w/p PAHs (17) (8270D SIM)

1155 - Collect surface water sample
NL-18-2013 (Dup)
- 2-1L amber w/HCl DRO (AK102)

Also complete Surface Water Sampling Visual Inspection Checklist: Visible sheening along surface of water body when sediment is disturbed. Light smell of petroleum during sampling. Water was noticed to be higher than seen during previous inspections.

Robert Boyd 8/27/13

TO66 Adak LTM 2013 8/27/13

1330 - A. Lewis & R. Boyd on site
East Canal (Former Power Plant, Building T-1451) for Seep & Shoreline Inspection.
- Evidence of seeps at Boom 11 & ~~Boom 9/12~~ RB 8/27/13. Not currently flowing. Boom 11 seep ~ 34 ft x 2 ft (migrated ~4 ft south from boom since 2012 inspection, high water reduced visible shoreline by approx. 2 ft). Boom 9/12, no visible seep ~~~80 ft x 2 ft~~ RB 8/27/13 ↑ or expanded
- Petroleum stained rocks, sediment, & vegetation along shoreline adjacent to Boom 11, as previously documented. Also some surface sheening
- Light surface sheening along Boom 9/12

1510 - A. Lewis & R. Boyd on site
MW-303-28 (Area 303).
PID Breathing Zone: 0.1 - 0.4 ppm
well head: 75 ppm. DTB = 33.93 ft btoc
Collect [DTW = 28.54 ft btoc]
DTP = 28.47 ft btoc, PT = 0.07 ft.
Did not collect sample

Robert Boyd 8/27/13

T0606 Adak LTM 2013 8/27/13

1510 cont...
MW-303-28-2013 or
MW-312-28-2013 (Dup)
as per WS#17 of SAP.
Will move duplicate analyses
(Total Lead, Dissolved Lead, &
NAPS) to 03-107, as
per S. Wunderlich. Complete Inspection.
1545 - A. Lewis & R. Boyd on site
03-107 (Area 303).
PID Breathing Zone: 0.0 ppm
well head: 679 ppm.
Weather: 60°F, 20 mph wind S.
1600 - Collect [DTW = 27.61 ft btoc]
1608 - Set flow rate: 400 mL/min
via peristaltic pump.
1613 - Collect water quality parameters
listed on water sampling log.
1637 - Parameters did not
stabilize, purge 3 times
casing volume: Purge 3.0 gal,
pH - 6.22, SC - 0.209 mS/cm, Turb - 5.0 NTUs,
DO - 0.66 mg/L, Temp - 11.71°C,
Sal - 0.00%, ORP - -5 mV.
Moderate petroleum odor.
Robert Boyd 8/27/13

T0606 Adak LTM 2013 8/27/13

1640 - Collect sample 03-107-2013
- 3-40mL amber VOA w/HCl GRO (AK101)
- 3-40mL amber VOA w/HCl Benzene (8260C)
- 1-500mL poly w/HNO_3 Total Lead (EPA 6020A)
- 1-500mL poly w/HNO_3 Diss Lead (EPA 6020A) (F)
- 1-500mL poly u/p Alkalinity SM2320B
  Sulfate 300.0

Test Kit Results		
DO ppm	Fe^{2+} ppm	CO_2 ppm
0.15	25	13

Fe^{2+} dilution factor = 10

1645 - Collect sample 03-117-2013 (Dup)
- 3-40mL amber VOA w/HCl GRO (AK101)
- 3-40mL amber VOA w/HCl Benzene (8260C)
- 1-500mL poly w/HNO_3 Total Lead (EPA 6020A)
- 1-500mL poly w/HNO_3 Diss Lead (EPA 6020A) (F)
- 1-500mL poly u/p Alkalinity SM2320B
  Sulfate 300.0
- 3-40mL amber VOA w/HCl Methane RSK175

Test Kit Results		
DO ppm	Fe^{2+} ppm	CO_2 ppm
0.15	25	13

Fe^{2+} dilution factor = 10
RPD = 0% for all test kits.
Robert Boyd 8/27/13

TOdo Adak LTM 2013 8/27/13

Late Entry

1640 - For sample 03-107-2013 also collected
• 3-40mL amber VOA w/HCl Methane (RSK175)

1745 - Also complete Monitoring Well Gauging Visual Inspection Checklist. DTB = 32.90 ft btoc

1810 - On site 111A to de-mob, QC paperwork

1845 - Former Power Plant, Building T-1451 Photo Log

Date	Time	Description
8/27/13	1115	E-701 facing east
8/27/13	1216	NL-08 (SW location) facing west (1)
8/27/13	1216	" " (2)
8/27/13	1359	East Canal facing south (1)
8/27/13	1359	" " (2)
8/27/13	1408	" " (3)
8/27/13	1410	" " (4)
8/27/13	1405	East Canal Boom 11 facing north
8/27/13	1405	East Canal Boom 11 close-up
8/27/13	1405	East Canal facing north (1)
8/27/13	1408	" " (2)
8/27/13	1410	" " (3)
8/27/13	1413	East Canal south culverts

Relinquished 8/27/13

TO'do Adak LTM 2013 8/27/13

1900 - AREA 303 Photo Log

Date	Time	Description
8/27/13	1521	MW-303-28 facing south
8/27/13	1757	03-107 facing northwest

1930 - End of day

Relinquished 8/27/13

T066 Adak LTM 2013 8/28/13

0700 - On site office. Conduct tailgate health & safety briefing. See SSHO logbook.
Topics include:
- Slips, trips, & falls
- Proper PPE
- Wind awareness
- Vehicle operations

Discuss work plan & QC topics.

0755 - Mob sample van.
PID Bump Test: 100 ppm
Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0817	4.02	4.49	⊖	8.91	15.09	0.20	301
1330	3.99	4.51	⊖	9.32	16.17	0.21	268
1800	4.01	4.43	⊖	8.39	13.84	0.20	260

0853 - A. Lewis & R. Boyd on site 03-012 (Area 303). Conduct physical hazard survey, no hazards observed.
PID Breathing zone: 0.0 ppm
well head: 0.0 ppm.
Weather: 50°F, light rain, 5 mph wind N.

0915 - Collect [DTW = 7.41 ft btoc]

0922 - Set flow rate: 400 mL/min via peristaltic pump.

Ralph Boyd 8/28/13

T066 Adak LTM 2013 8/28/13

0927 - Collect water quality parameters listed on water sampling log.

0947 - Parameters did not stabilize, purge 3 times casing volume: Purge 2.0 gal, pH - 5.46, SC - 0.128 mS/cm, Turb - 0 NTUs, DO - 3.84 mg/L Temp - 11.19°C, Sal - 0.00%, ORP - 258 mV. Light smell of petroleum, clear water.

0955 - Collect sample 03-012-2013 MS/MSD on GRO, Alkalinity & Sulfate, and Methane only.
- 9-40mL amber VOA w/HCl GRO (AK101)
- 3-40mL amber VOA w/HCl BTEX (8260C)
- 2-1L amber w/HCl DRO (AK102)
- 2-1L amber u/p PAHs (n) (8270D SIM)
- 3-500mL poly u/p Alkalinity (SM2320B) Sulfate 300.0
- 9-40mL amber VOA w/HCl Methane (RSK175)

Test Kit Results		
DO ppm	Fe^{2+} ppm	CO_2 ppm
4	0	21

Also complete Monitoring Well Gauging Visual Inspection Checklist. DTB = 11.48 ft btoc.

Ralph Boyd 8/28/13

T0060 Adak LTM 2013 8/28/13

1105 - A. Lewis & R. Boyd on site MRP-MW2 (Area 303 & SWMU62, Sandy Cove Housing 102, 107, and 146 Area. Conduct physical hazard survey, no hazards observed.
PID Breathing Zone: 0.0ppm, wellhead: 0.0ppm
Weather: 50°F, 5mph wind N
1115 - Collect [DTW = 21.69 ft btoc]
1122 - Set flow rate: 400mL/min via peristaltic pump.
1127 - Collect water quality parameters listed on water sampling log.
1152 - Parameters did not stabilize, purge 3 times casing volume!
Purge 3 gal, pH - 6.24, SC - 0.275 mS/cm, Turb - 2 NTUs, DO - 0.00mg/L, Temp - 9.40°C, Sal - 0.00%, ORP - -24mV. Moderate petroleum odor, clear water w/ orange particulate.
1200 - Collect sample MRP-MW2-2013
- 3-40mL amber VOA w/HCl GRO (AK101)
- 3-40mL amber VOA w/HCl BTEX (8260C)
- 2-1L amber w/HCl DRO (AK102)
- 1-500mL poly w/HNO3 Total Lead (EPA 6020A)

Robert Boyd 8/28/13

T0060 Adak LTM 2013 8/28/13

1200 cont...
- 1-500mL poly w/HNO3 Diss. Lead (EPA 6020A) (F)
- 1-500mL poly u/p Alkalinity (SM2320B) Sulfate (300.0)
- 3-40mL amber VOA w/HCl Methane (RSK175)

Test Kit Results		
DO ppm	Fe^{2+} ppm	CO_2 ppm
0.05	40	11

Fe^{2+} dilution factor = 10

1210 - Collect sample MRP-MW12-2013 (Dup)
- 3-40mL amber VOA w/HCl BTEX (8260C)

Also complete Monitoring Well Gauging Visual Inspection Checklist
DTB = 28.02 ft btoc
1400 - On site MW-303-37 (Area 303). Conduct physical hazard survey, no hazards observed
PID Breathing zone: 0.0ppm
wellhead: 0.0ppm.
Weather: 52°F, Wind 5mph N
1407 - Collect [DTW = 13.07 ft btoc]
1410 - Set flow rate 400mL/min via peristaltic pump.
1415 - Collect water quality parameters listed on water sampling log.

Robert Boyd 8/28/13

TO66 Adak LTM 2013 8/28/13

1430 - R. Boyd on site MW-303-39 (Area 303). Collect [DTW = 21.41 ft btoc]

1435 - R. Boyd on site MW-303-37.

1440 - Parameters stabilize: Purge 2.5 gal, pH - 5.53, SC - 0.105 mS/cm, Turb - 0 NTUs, DO - 5.74 mg/L, Temp - 10.17°C, Sal - 0.00%, ORP - 164 mV. Odorless, clear water.

1445 - Collect sample MW-303-37-2013

- 3-40mL amber VOA w/HCl GRO (AK101)
- 3-40mL amber VOA w/HCl BTEX (8260C)
- 2-1L amber w/HCl DRO (AK102)
- 2-1L amber u/p PAHs(17) (8270D SIM)
- 1-500mL poly u/p Alkalinity (SM2320B) Sulfate (300.0)
- 3-40mL amber VOA w/HCl Methane (RSK175)

Test Kit Results		
DO ppm	Fe^{2+} ppm	CO_2 ppm
5.5	0	17

Also complete Monitoring Well Gauging Inspection checklist

DTB = 18.52 ft btoc.

1535 - A. Lewis & R. Boyd on site MW-303-39 (Area 303). Conduct physical hazard survey.

Robert Boyd 8/28/13

TO66 Adak LTM 2013 8/28/13

1535 cont....

no hazards observed.

PID Breathing Zone: 0.0 ppm

well head: 0.0 ppm

Weather: 52°F, 5 mph wind N.

1545 - Collect [DTW = 21.41 ft btoc]

1555 - Set flow rate 400 mL/min via peristaltic pump.

1559 - Collect water quality parameters listed on water sampling log.

1619 - Parameters stabilize: Purge 2.5 gal, pH - 5.99, SC - 0.205 mS/cm, Turb - 0 NTUs, DO - 6.40 mg/L, Temp - 7.44°C, Sal - 0.00%, ORP - 105 mV. Light smell of petroleum, clear water.

1630 - Collect sample MW-303-39-2013

- 3-40mL amber VOA w/HCl GRO (AK101)
- 3-40mL amber VOA w/HCl BTEX (8260C)
- 2-1L amber u/p Dibenz(a,h)anthracene (8270D SIM)
- 1-500mL Poly w/HNO_3 Total Lead (EPA 6020A)
- 1-500mL Poly w/HNO_3 Diss Lead (EPA 6020A) F
- 1-500mL Poly u/p Alkalinity (SM2320B) Sulfate (300.0)

Robert Boyd 8/28/13

T066 Adak LTM 2013 8/28/13

1630 cont...

- 3-40mL amber VOA w/HCl Methane (RSK175)

Test Kit Results		
DO ppm	Fe^{2+} ppm	CO_2 ppm
5	30	20

Fe^{2+} dilution factor = 10

Also completed Monitoring Well Gauging Visual Inspection Checklist. DTB = 28.02 ftbtoc (medium bottom). 3 bollards, 2 are very loose, leaning, & easily removable.

1720 - R. Boyd & A. Lewis on site

111A. De-mob & QC paperwork

1815 - Area 303 Photo Log

Date	Time	Description
8/28/13	1048	03-012 facing southwest
8/28/13	1242	MRP-MW2 facing southeast
8/28/13	1517	MW-303-37 facing northwest
8/28/13	1824	MW-303-39 facing north

1900 - End of day

RaleighBoyd 8/28/13

T066 Adak LTM 2013 8/29/13

0700 - On site office. Conduct tailgate health & safety briefing. See SSHO logbook.

Topics include:

- Slips, trips, & falls
- proper PPE
- proper lifting techniques

Discuss work plan & QC topics.

0750 - Mob sample van.

PID Bump Test! 100ppm

Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0815	4.01	4.48	0	9.06	12.75	0.20	334
1230	3.99	4.50	0	9.39	11.21	0.21	288
NA							

0850 - A. Lewis & R. Boyd on site MW-303-41 (Area 303). Conduct physical hazard survey, no hazards observed.

PID Breathing Zone: 0.0ppm

Well head: 0.0 ppm.

Weather: 54°F, 5mph wind N, light rain.

Collect [DTW = Dry], probe sounding water at 24.94 ftbtoc,

RaleighBoyd 8/29/13

TO66 Adak LTM 2013 8/29/13

0850 cont....
no water on probe (triple checked).
Light mud starting at 25.12 ft btoc,
DTB = 25.61 ft btoc (soft bottom).
Did not collect sample
MW-303-41-2013, as per
S Wunderlich & A. Franzen. MS/MSD to MW-303-42
Complete Monitoring Well Gauging
Visual Inspection Checklist.
Orange particulate on Interface
Probe.

0935 - A. Lewis & R. Boyd on site
MW-303-42 (Area 303). Conduct
physical hazard survey, no
hazards observed. Removed sock in well.
PID Breathing Zone: 0.0 ppm
wellhead: 54 ppm
Weather: 54°F, 5 mph wind N, light rain.

0945 - Collect [DTW = 28.90 ft btoc]

0950 - Set flow rate: 400 mL/min
via peristaltic pump

0953 - Collect water quality parameters
listed on water sampling log.

1018 - Parameters did not stabilize,
purge 3 times casing volume:

Robert Boyd 8/29/13

TO66 Adak LTM 2013 8/29/13

1018 cont...
Purge 2.5 gal, pH - 6.20, SC - 0.272 mS/cm,
Turb - 11 NTUs, DO - 1.01 mg/L, Temp - 8.32°C,
Sal - 0.00%, ORP - 59 mV. Clear
water (some orange particulate),
heavy petroleum odor.

1030 - Collect sample MW-303-42-2013
- 3 - 40 mL amber VOA w/HCl GRO (17K101)
- 3 - 40 mL amber VOA w/HCl Benzene (8260C)
- 3 - 500 mL poly u/p Alkalinity (SM2320B)
  Sulfate (300.0)
- 9 - 40 mL amber VOA w/HCl Methane (RSK175)

MS/MSD on Alkalinity & Sulfate and
Methane (NAPs) only

Test Kit Results		
DO (ppm)	Fe^{2+} (ppm)	CO_2 (ppm)
0.7	25	13

Fe^{2+} dilution factor = 10

Duplicate Test Kit Results		
DO (ppm)	Fe^{2+} (ppm)	CO_2 (ppm)
0.7	25	13

Fe^{2+} dilution factor = 10

RPD = 0 for all test kit results.
Also completed Monitoring Well Gauging
Visual Inspection Checklist. DTB = 33.29 ft btoc.

Robert Boyd 8/29/13

T066 Adak LTM 2013 8/29/13

1130 - A. Lewis & R. Boyd on site 111A to QC COCs and pack samples for shipment to ALS via Alaska Air Goldstreak

1400 - A. Lewis & R. Boyd on site Alaska Airlines to Ship 12 coolers (total weight 580 lbs) to ALS via Goldstreak AWB# 828-6 9485

1500 - Prep Unit 168c for C. Alferness & B. Kercher.

1700 - On site AMW-704. Identified as potential well for future decommissioning. See page 152.

1745 - De-mob and QC paper work.

1800 - Area 303 Photo Log

Date	Time	Description
8/29/13	1117	MW-303-42 facing west
8/29/13	1126	MW-303-41 facing southwest

1830 - Received U52 Horiba HSG# UADHWCVE (Asset# 1120875) from Argus Hazco, and 100 ft x 5/8" interface meter from TTT Environmental.

1900 - End of day.

Bennett Boyd 8/29/13

T066 Adak LTM 2013 8/30/13

0630 - Calibrate Horiba (U-52 UADHWCVE) received 8/29/13.

pH - 3.99 Temp - 14.68°C
SC - 4.45 mS/cm Sal - 0.22%
Turb - 0 NTUs ORP - 247 mV
DO - 9.98 mg/L

0700 - On site office. Conduct tailgate Health & Safety briefing. See SSHO logbook.
Topics include:
- Slips, trips, & falls
- Proper PPE.
- Earthquake at 0725, 7.0 magnitude, per USGS

0800 - Mob sample van.
PID Bump Test: 100 ppm
Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0810	4.02	4.50	Ø	10.39	14.43	0.20	316
1240	4.00	4.51	Ø	10.08	12.61	0.19	287
1820	4.00	4.53	Ø	9.81	14.22	0.21	294

0850 - A. Lewis & R. Boyd on site 651 (SWMU 60, Tank Farm A). Conduct physical hazard survey, no hazards observed.

Bennett Boyd 8/30/13

TO66 Adak LTM 2013 8/30/13

0850 cont...
PID Breathing Zone: 0.0 ppm
wellhead: 0.0 ppm
Weather: 56°F, lightrain, 5mph wind S.
0900 - Collect [DTW = 9.10 ft btoc]
0910 - Set flow rate 400mL/min via peristaltic pump.
0912 - Collect water quality parameters listed on water sampling log.
0942 - Parameters did not stabilize, purge 3 times casing volume: Purge 3.0 gal. pH - 6.19, SC - 0.204 mS/cm, Turb - 0 NTUs, Temp - 9.42°C, Sal - 0.01%, ORP - -1 mV.
0945 - Collect sample 651-2013
- 3-40mL amber VOA w/HCl BTEX (8260C)
- 2-1L amber w/HCl DRO (AK 102)
- 2-1L amber u/p PAHs (17) (8270D sim)

Also complete Monitoring Well Gauging Visual Inspection Checklist
DTB = 14.92 ft btoc (solid bottom)
1045 - A. Lewis & R. Boyd on site MW-E006 (SWMU 60, Tank Farm A).

Robert Boyd 8/30/13

TO66 Adak LTM 2013 8/30/13

1045 cont...
Conduct physical hazard survey, no hazards observed.
PID wellhead: 0.0 ppm, Breathing zone: 0.0 ppm
Weather: 56°F, 5mph wind S
1052 - Collect [DTW = 6.38 ft btoc]
1056 - Set flow rate 400mL/min via peristaltic pump.
1059 - Collect water quality parameters listed on water sampling log.
1119 - Parameters stabilize: Purge 2.0 gal, pH - 6.54, SC - 0.310 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp - 9.02°C, Sal - 0.00%, ORP - -38 mV. Clear, odorless water.
1130 - Collect sample MW-E006-2013
- 3-40mL amber VOA w/HCl Benzene (8260C)

Also complete Monitoring Well Gauging Visual Inspection Checklist.
DTB = 18.43 ft btoc (solid bottom)
1300 - A. Lewis & R. Boyd on site LC5A (SWMU 60, Tank Farm A).
Conduct physical hazard survey, no hazards observed.

Robert Boyd 8/30/13

1300 cont...
PID Breathing zone: 0.0ppm
well head: 0.0ppm
Weather: 55°F, 5 mph wind S
1315 - Collect [DTW = 6.95 ft btoc]
1325 - Set flowrate 400 mL/min via peristaltic pump.
1328 - Collect water quality parameters listed on water sampling log.
1353 - Parameters stabilize: Purge 2.5 gal, pH - 6.64, SC - 0.213 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp - 11.38°C, Sal - 0.00%, ORP - -31 mV. Clear water, hint of petroleum odor at time of 1343 measurements and continued throughout purge.
1400 - Collect sample LC5A-2013
- 3-40mL amber VOA w/HCl BTEX (8260C)
- 2-1L amber w/p PAHs (17) (8270D SIM)

Also complete Monitoring Well Gauging Visual Inspection Checklist.
DTB = 12.57 ft btoc (medium bottom).
1430 - A. Lewis & R. Boyd on site
Robert Boyd 8/30/13

1430 cont...
03-420 (Arctic Acres Housing Area). Conduct physical hazard survey. Observed nearby pieces of sheet metal.
PID Breathing Zone:
well head:
Weather: 55°F, 5 mph wind S
1440 - Collect [DTW = 23.06 ft btoc]
1443 - Set flow rate 400 mL/min via peristaltic pump.
1445 - Collect parameters listed on water sampling log.
1505 - Parameters stabilize: Purge 2.0 gal, pH - 6.05, SC - 0.216 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp - 7.40°C, Sal - 0.00%, ORP - 27 mV. Orange particulate at initial purge, clear water, no odor.
1510 - Collect sample 03-420-2013
- 2-1L amber w/HCl DRO (AK102)

Also complete Monitoring Well Gauging Visual Inspection checklist:
DTB = 28.35 ft btoc (soft bottom)
Robert Boyd 8/30/13

T066 Adak LTM 2013 8/30/13

1530 - A. Lewis & R. Boyd on site
03-421 (Arctic Acres Housing Area).
Conduct physical hazard survey,
no hazards observed.
PID Breathing Zone: 0.0 ppm
well head: 0.0 ppm
Weather: 56°F, 10 mph wind S.
Collect [DTW = 23.05 ft btoc]
DTB = 28.14 ft btoc. No odors.

1550 - A. Lewis & R. Boyd on site
03-416 (Arctic Acres Housing Area).
Conduct physical hazard survey,
no hazards observed.
PID Breathing Zone: 0.0 ppm
well head: 9.0 ppm
Weather: 56°F, 10 mph wind S
Collect [DTW = 19.96 ft btoc]
DTB = 30.17 ft btoc (soft bottom)

1610 - A. Lewis & R. Boyd on site
03-890 (Arctic Acres Housing Area).
Conduct physical hazard survey,
no hazards observed.
PID Breathing Zone: 0.0 ppm, wellhead: 80.0 ppm
56.5°F, sun, 5 mph wind S.
Collect [DTW = 23.90 ft btoc]

R. Boyd 8/30/13

T066 Adak LTM 2013 8/30/13

1610 cont...
DTB = 31.69 ft btoc (soft bottom)
Light petroleum odor.

1655 - A. Lewis & R. Boyd on site
RW-18/36-05 (South of Runway)
Conduct physical hazard
survey, no hazards observed.
PID Breathing Zone: 0.0 ppm
Wellhead: 0.4 ppm
Weather: 56°F, 10 mph wind S
Collect [DTW = 8.93 ft btoc]
DTB = 16.56 ft btoc (extremely
soft bottom)

1730 - On site office and
111A to de-mob, QC paper
work

1805 - SWMU 60, Tank Farm A Photo Log

Date	Time	Description
8/30/13	1133	MW-E006 facing south
8/30/13	1224	651 facing east
8/30/13	1408	LC5A facing west

South of Runway 18-36 Photo Log

Date	Time	Description
8/30/13	1702	RW-18-36-05 facing northwest

R. Boyd 8/30/13

T066 Adak LTM 2013 8/30/13

1805 cont...

Arctic Acres Housing Area Photo Log

Date	Time	Description
8/30/13	1523	03-420 facing southeast
8/30/13	1523	03-420 close-up
8/30/13	1543	03-421 facing southeast
8/30/13	1608	03-890 facing west
8/30/13	1611	03-416 facing south
8/30/13	1611	03-416 close-up

1900 - End of day

Robert Boyd 8/30/13

T066 Adak LTM 2013 8/31/13

0630 - Download previous year's sediment and surface water sampling photos.

0700 - On site office. Conduct tailgate Health & Safety briefing. See SSHO logbook.

Topics include:

- slips, trips, & falls
- proper PPE
- earthquake awareness

Discuss day's work plan.

0750 - MOB sample van.

PID Bump test:

Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0820	3.99	4.50	⊖	8.21	14.90	0.19	345
1200	3.99	4.51	⊖	9.52	15.37	0.20	297
NA	NA	NA	NA	NA	NA	NA	NA

0850 - A. Lewis & R. Boyd on site NSWSD-7 (South of Runway 18-36). Conduct physical hazard survey, no hazards observed. Stream size approx. 15 ft wide x 2 ft deep w/ steady flow. Salmon, eagles,

Robert Boyd 8/31/13

0850 cont...
and other shorebirds present in area. No sheen or visible contamination on water.
0910 - Collect water quality parameters: pH-6.21, SC-0.885 mS/cm, Turb-21 NTUs, DO-7.28 mg/L, Temp-11.40°C, Sal-0.6%, ORP-138 mV. Slightly turbid water with no odors.
0915 - Collect sample NSWSD-7-2013 (MS/MSD)
- 9-40mL amber VOA w/HCl BTEX (8260C)
- 6-1L amber w/HCl DRO (AK102)
- 6-1L amber u/p PAHs(17) (8270D SIM)

1030 - A. Lewis & R. Boyd on site 852 sediment sample location (SWMU 60, Tank Farm A). Conduct physical hazard ~~analysis~~ survey, no hazards observed. RB 8/31/13
1045 - Collect sediment sample 852S-2013
- 2-8 oz amber u/p DRO (AK102) 2-methylnapthalene & phenanthrene (8270D SIM)

1055 - Collect sediment sample 862S-2013 (Dup)

Robert Boyd 8/31/13

1055 cont...
- 2-8 oz amber u/p DRO (AK102)

Heavy petroleum odor at sample location. Sediment is small grain sand with light organic matter on surface. Top 3/8" of sediment is light brown w/ fine orange, then dark black material below. Sheen and color change 3/8" deep from light brown to dark black. Observed coho salmon ~75' down gradient, 2 eagles, 1 raven, and shorebirds near sample location.
1340 - A. Lewis & R. Boyd on site 02-451 (NMCB). Conduct physical hazard ~~analysis~~ survey, multiple pieces of scrap metal and debris in the area (will apply to all wells in area). RB 8/31/13
PID Breathing Zone: 0.0 ppm
wellhead: 0.0 ppm

Robert Boyd 8/31/13

1340 cont...
Weather: 53°F, light rain, 15 mph wind S. Collect [DTW=8.51 ft btoc]
PT = trace amount (<0.01 ft)
DTB = 21.15 ft btoc (soft bottom)

1353 - A. Lewis & R. Boyd on site 02-818 (NMCB). Conduct physical hazard survey. See 1340 entry.
PID Breathing Zone: 0.0 ppm
wellhead: 180 ppm.
Weather: 53°F, light rain, 15 mph wind S. Collect [DTW=8.98 ft btoc]
PT = trace amount (<0.01 ft)
DTB = 16.62 ft btoc (solid bottom)
Light to moderate petroleum odor. Sock in well.

1408 - A. Lewis & R. Boyd on site 02-452 (NMCB). Conduct physical hazard survey. See 1340 entry.
PID Breathing Zone: 0.0 ppm.
wellhead: 0.1 ppm.
Weather: 53°F, light rain, 15 mph wind S.
Collect [DTW=9.32 ft btoc]
DTB = 20.11 ft btoc (solid bottom)

Robert Boyd 8/31/13

1416 - A. Lewis & R. Boyd on site 02-817 (NMCB). Conduct physical hazard survey, see 1340 entry. PID Breathing Zone: 0.0 ppm, Wellhead: 7.2 ppm.
Weather: 53°F, light rain, 15 mph winds S. Collect [DTW = 9.95 ft btoc]
DTB = 17.18 ft btoc (solid bottom)

1423 - A. Lewis & R. Boyd on site 02-461 (NMCB). Conduct physical hazard survey, see 1340 entry.
PID Breathing Zone: 0.1 ppm
Well head: 1400 ppm.
Weather: 53°F, 15 mph wind S.
Collect [DTW = 6.74 ft btoc]
DTB = 14.33 ft btoc. Wellhead has heavy petroleum odor, but water does not. No product.

1440 - A. Lewis & R. Boyd on site 02-301 (NMCB). Conduct physical hazard survey, ~~see 1340 entry~~ RB 8/31/13
no hazards observed.
PID Breathing Zone: 0.0 ppm, well head: 0.0 ppm. Weather: 53°F, 20 mph wind S.

Robert Boyd 8/31/13

1440 cont...
Collect [DTW = 12.36 ft btoc]
DTB = 19.53 ft btoc (solid bottom).
1447 - A. Lewis & R. Boyd on site
E-201 (NMCB). Conduct physical
hazard survey, no hazards
~~survey, No haz~~ RB 8/31/13 observed.
PID Breathing zone: 0.0 ppm
well head: 0.0 ppm. Weather: 53°F,
light rain, 20 mph wind S.
Collect [DTW = 13.22 ft btoc]
DTB = 18.90 ft btoc (solid bottom).
1458 - A. Lewis & R. Boyd on site
NMCB-04 (NMCB). Conduct physical
hazard survey, no hazards
observed. PID Breathing zone: 0.0 ppm,
wellhead: 720 ppm. Weather: 53°F,
light rain, 20 mph wind S.
Collect [DTW = 12.25 ft btoc]
DTP = 11.82 ft btoc, PT = 0.43 ft.
DTB = 18.48 ft btoc.
1532 - A. Lewis & R. Boyd on site
NMCB-07 (NMCB). Conduct
physical hazard survey, see
1340 entry.
Robert Boyd 8/31/13

1532 cont...
PID Breathing zone: 0.0 ppm,
wellhead: 127 ppm.
Weather: 53°F, light rain,
20 mph wind S.
Collect [DTW = 9.58 ft btoc]
DTP = 9.22 ft btoc, PT = 0.36 ft
Will not collect sample
NMCB-07-2013 as per
WS#17 of SAP (PT ≥ 0.02 ft)
DTB = 19.20 ft btoc (soft bottom).
Sock in well.
1615 - On site bunker to
dispose of PPE and
transfer purge water to
drum.
1730 - On site 111A to de-mob,
pack samples, QC paperwork.
1630 - South of Runway 18-36 Photo Log

Date	Time	Description
8/31/13	1025	NSWSD-07 facing east

SWMU 60, Tank Farm A Photo Log

8/31/13	1101	852 facing east
8/31/13	1101	852 (sed location) facing east.
8/31/13	1102	852 (sed location) facing southeast.

Robert Boyd 8/31/13

TCLO Adak LTM 2013 8/31/13

1630 cont...

Date	Time	Description.
8/31/13	1102	852 (sed location) close-up.

NMCB Photo Log

8/31/13	1347	02-451 facing southeast
8/31/13	1402	02-818 facing southeast
8/31/13	1410	02-452 facing southeast
8/31/13	1417	02-817 facing east
8/31/13	1431	02-461 close-up
8/31/13	1443	02-301 facing south
8/31/13	1448	E-201 facing west
8/31/13	1508	NMCB-04 facing east
8/31/13	1527	NMCB-07 facing east

1900 - End of day

Robert Boyd 8/31/13

TCLO Adak LTM 2013 9/2/13

0700 - On site office. Conduct tailgate Health & Safety briefing. See SSHO logbook.
Topics include:
- Proper PPE.
- Slips, trips, & falls
- Power outages

Discuss work plan & QC topics.

0800 - Mob sample van.
Did not calibrate horiba or bump test PID (sediment sampling only today).

0845 - A. Lewis & R. Boyd on site sediment sample location
NSWSD-4 (South of Runway 18-36).
Conduct physical hazard survey, slippery rocks along shoreline.

0900 - Collect sediment sample
NSWSD-4S-2013
- 2-8oz amber u/p DRO (AK102)

2-methylnapthalene & phenanthrene (8270DSIM)
Sediment is grey (top 1/8" light grey). Small grain sand w/ intermittent small 3/8" gravel mixed in. No organic matter in sample.

Robert Boyd 9/2/13

0900 cont---
organic matter observed at waters edge on rocks. No odors. Same debris as previously documented in past inspections. Grass growing along shoreline. Observed salmon in creek, also observed two eagles and waterfowl nearby.
Weather: 45°F, 25mph wind E, rain.
0920 - A. Lewis & R. Boyd on site sediment sample location NSWSD-5 (South of Runway 18-36). Conduct physical hazard survey, slippery rocks along shoreline.
0930 - Collect sample (sediment) NSWSD-5S-2013
• 2-8oz amber w/p DRO (AK 102)
2-methylnapthalene & phenanthrene (8270D SIM)
Black sediment w/ 3/8" - 1/2" rocks. Seaweed observed along the surface of rocks and sediment in healthy looking condition. Medium grain sand sediment.
Robert Boyd 9/2/13

0930 cont...
Heavy petroleum odor before and after sampling. Same debris as previously documented in past inspections. Moderate sheen along water's edge after sampling. Grass along shoreline. No insects or invertebrates seen in or on sediment. Observed salmon in creek, eagle, waterfowl, and shorebirds nearby.
1100 - A. Lewis & R. Boyd check out tide line along beach to Palisades in preperation for sampling site.
1200 - On site 111A to de-mob, GC paperwork.

South of Runway 18-36 Photo Log

Date	Time	Description
9/2/13	0850	NSWSD-4 (sed location) close-up
9/2/13	0851	NSWSD-4 (sed location) facing north
9/2/13	0922	NSWSD-5 (sed location) close-up
9/2/13	0922	NSWSD-5 (sed location) facing south

1600 - 4-Gas Meter Bump Test
CO - 49 H_2S - 14.9
Oxy - 17.7% LEL - 53%
Robert Boyd 9/2/13

T066 Adak LTM 2013 9/2/13

1900 - End of day.

9/2/13

T066 Adak LTM 2013 9/3/13

0630 - Begin paperwork prep.

0700 - On site office. Conduct tailgate Health & Safety briefing. See SSHO logbook.

Topics include:

- Slips, trips, & falls.
- Proper PPE
- Free product safety / awareness.
- Thermal stress.

0730 - Mob sample van.

PID Bump Test: 100 ppm

Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0737	4.00	4.53	0	7.81	12.14	0.19	346
1240	3.99	4.49	0	8.94	12.57	0.20	291
1735	3.99	4.51	Ø	9.22	12.84	0.20	305

0816 - A. Lewis, R. Boyd on site NSWSD-8 (South of Runway 18-36). Conduct physical hazard survey, slippery rocks along shoreline. Weather: 47°F, 20mph wind S, Clear

0820 - Collect water quality parameters: pH - 7.14, SC - 3.28 mS/cm, Turb - 11 NTUs, DO - 7.89 mg/L, Temp - 11.82°C, Sal - 0.10%, ORP - 141 mV. Clear oderless water.

9/3/13

T066 Adak LTM 2013 9/3/13

0825 - Collect surface water sample NSWSD-8-2013.

- 3-40mL amber VOA w/HCl BTEX (8260c)
- 2-1L amber w/HCl DRO (AK102)
- 2-1L amber w/p PAHs (17) (8270D SIM)

Also complete Surface Water Sampling Visual Inspection Checklist: Vegetation along shoreline in healthy condition. Observed Seagulls, Shorebirds, eagle, and Coho Salmon nearby. Stream size is ~ 25ft wide x 16" deep w/ strong flow. Also observed retaining wall ~ 25ft down stream is collapsing.

0907 - A. Lewis & R. Boyd on site surface water location 852 (SWMU 60, Tank Farm A). Conduct physical hazard survey, slippery rocks along shoreline. Weather: 45°F, 20mph wind S, clear.

0915 - Collect water quality parameters: pH - 5.89, SC - 6.55mS/cm, Turb - 23 NTUs, DO - 6.42 mg/L, Temp - 10.02°C, Sal - 0.21%, ORP - -101mV. Moderate petroleum odor.

Robert Boyd 9/3/13

T066 Adak LTM 2013 9/3/13

0925 - Collect surface water sample 852-2013

- 3-40mL amber VOA w/HCl BTEX (8260c)
- 2-1L amber w/HCl DRO (AK102)
- 2-1L amber w/p PAHs (17) (8270D SIM)

Also complete Surface Water Sampling Visual Inspection Checklist: Sample collected ~ 75ft down gradient from Boom 10 as done in 2012. Orange particulate observed over surface of sand, mostly along stream. Moderate petroleum odor w/o sheening. Sample surface water is slightly cloudy due to wind and contains orange particulate. Stream size is ~ 10ft wide x 12" deep. Vegetation along shoreline. Also observed seal, coho salmon, seagull, teal, & shorebirds.

0950 - A. Lewis & R. Boyd on site sediment sample location NSWSD-2 (South of Runway 18-36). Conduct physical hazard survey, slippery rocks along

Robert Boyd 9/3/13

T0606 Adak LTM 2013 9/3/13

0950 cont...
Shoreline. Weather: 47°F, 20mph wind S, Clear.
1000 - Collect sediment sample NSWSD-2S-2013
- 2-8oz amber w/p DRO (AK102)
2-methylnapthalene & phenanthrene (8270 D SIM)
Also complete Sediment Sampling Visual Inspection Checklist:
Sediment composed of black sand w/ sheen, small grain sand w/ 3/8" - 1/2" rock. Seagrass along rocks at sample location. Moderate petroleum odor before & after sampling. After sediment was disturbed, sheening 1/2" below surface. Observed small invertebrates (sandfleas) along sediment surface and 1/2" below surface in sediment. Also observed coho salmon, raven, teal, & shore birds near by.
1030 - On site E-218, also labeled AMW-218 (South of Runway 18-36) Identified as potential well for future decommissioning. See Page 152.

Robert Byrd 9/3/13

T0606 Adak LTM 2013 9/3/13

1100 - A. Lewis & R. Byrd on site E-201 (NMCB). Conduct physical hazard survey, no hazards observed. PID Breathing Zone: 0.0ppm, wellhead: 0.0ppm Weather: 48°F, 10 mph wind S, Clear.
1115 - Collect [DTW = 12.99 ft btoc]
1120 - Set flow rate: 400mL/min via peristaltic pump.
1124 - Collect water quality parameters listed on water sampling log.
1144 - Parameters stabilize: Purge 2.0gal, pH - 6.40, SC - 0.254mS/cm, Turb - 10 NTU, DO - 1.66mg/L, Temp - 7.03°C, Sal - 0.00%, ORP - -51mV. Fine black particulate observed during initial purge. No odor. Water clear during sample collection.
1150 - Collect sample E-201-2013
- 3-40mL amber VOA w/HCl GRO (AK101).
1330 - A. Lewis & R. Byrd on site 04-306 (Tanker Shed). Conduct physical hazard survey, no hazards observed. PID Breathing Zone: 0.0ppm, wellhead: 7.0ppm. Weather: 45°F, 10mph wind S, overcast.

Robert Byrd 9/3/13

T066 Adak LTM 2013 9/3/13

1345 - Collect [DTW = 7.21 ft btoc]
1355 - Set flow rate: 400 mL/min via peristaltic pump.
1400 - Collect water quality parameters listed on water sampling log.
1420 - Parameters Stabilize. Purge 2.0 gal, pH - 6.08, SC - 0.270 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp - 9.78°C, Sal - 0.00%, ORP - -21 mV. Light petroleum odor.
1425 - Collect sample 04-306-2013
• 2-1L amber w/HCl DRO (AK 102)
Also complete Monitoring Well Gauging Visual Inspection Checklist.
DTB = 13.06 ft btoc (solid bottom)
1440 - A. Lewis & R. Boyd on site 04-175 (Tanker Shed). Conduct physical hazard survey, multiple pieces of metal debris in immediate area.
PID Breathing Zone: 0.0 ppm, Wellhead: 9.8 ppm.
Weather: 48°F, 10mph wind S, overcast.
1455 - Collect [DTW = 6.85 ft btoc]
1502 - Set flow rate: 400 mL/min via peristaltic pump.

Rahul Boyd 9/3/13

T066 Adak LTM 2013 9/3/13

1507 - Collect water quality parameters listed on water sampling log.
1537 - Parameters Stabilize: Purge 3.0 gal, pH - 6.13, SC - 0.289 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp - 10.11°C, Sal - 0.00%, ORP - -28 mV. No odor, clear water.
1545 - Collect sample 04-175-2013
• 2-1 Lamber w/HCl DRO (AK 102)
Also complete Monitoring Well Gauging Visual Inspection Checklist: DTB = 14.41 ft btoc (solid bottom)
1630 - On site Bunker to transfer purge water to drum.
1700 - On site 111A to de-mob & QC paperwork.

South of Runway 18-36 Photo Log

Date	Time	Description
9/3/13	0331	NSWSD-8 (SW location) facing west
9/3/13	1004	NSWSD-2 (sed location) facing north
9/3/13	1004	NSWSD-2 (sed location) ~~facing~~ RAB 9/3/13 close-up

SWMU60, Tank Farm A Photo Log

Date	Time	Description
9/3/13	0912	852 (SW location) facing east

Rahul Boyd 9/3/13

T066 Adak LTM 2013 9/3/13

1700 cont...

Tanker Shed Photo Log

Date	Time	Description
9/3/13	1603	04-306 facing northwest
9/3/13	1607	04-175 facing south

1900 - End of day

Robert Bred 9/3/13

T066 Adak LTM 2013 9/4/13

0700 - On site office. Conduct tailgate Health & Safety briefing. See SSHO logbook. Topics include:

- Slips, trips, & falls
- Proper ppe
- Earthquake preparedness

0740 - Mob sample van. No Horiba calibration check or PID bump test needed for sediment sampling.

Late Entry

0700 - Also discussed work plan

0830 - A. Lewis, R. Boyd & S. Wunderlich depart to Palisades Landfill via beach access.

0900 - On site 102 (SWMU 11, Palisades Landfill). Conduct physical hazard survey, multiple pieces of metal nearby.

0905 - Collect sediment sample 102S-2013

2-8oz amber u/p PCB Aroclors (8280A Low Level), PAHs(17)(8270D SIM) and Bis(2-ethylhexyl) phthalate(8270D low Level),

Robert Bred 9/4/13

0905 cont...
Antimony, Arsenic, & Nickel (6020A).
Also complete Sediment Sampling Visual Inspection Checklist.
~~Medi~~ RB 9/4/13 Light brown sediment w/ fines. Intermittent 3/8" gravel. Vegetation in sediment and nearby. No odors. Palisades Landfill is ~150ft up gradient from sample location. Two worms in sediment and raven & eagle nearby.
0930 - Collect sediment sample
112S-2013 (Dup)
• 2-8oz amber w/p Same Analyses as Previous Sample.
0940 ~~0955~~ RB 9/4/13 - A. Lewis, R. Boyd, & S. Wunderlich on site 103 (SWMU11, Palisades Landfill). Conduct physical hazard survey, slippery rocks along shoreline.
0955 - Collect sediment sample
RB 9/4/13 103S-2013 3-4oz
• ~~2-8oz~~ amber w/p Same Analyses as Previous Sample.
Also complete Sediment Sampling Visual Inspection Checklist.
Robert Boyd 9/4/13

0955 cont...
Fine to medium grain sand (very little sediment). Sediment dark grey w/ red, white, & black particles. No odors. Kelp, seaweed & barnacles nearby.
1055 - After returning to van via beach access, A. Lewis, R. Boyd, & S. Wunderlich on site 101 (SWMU11, Palisades Landfill). Conduct physical hazard survey, no hazards observed.
1115 - Collect sediment sample
101S-2013 (MS/MSD)
• 6-8oz amber w/p Same Analyses as Previous Sample.
Also complete Sediment Sample Visual Inspection Checklist. Medium brown, silty sediment. Vegetation in sediment and nearby. Two worms in sediment.
1200 - On site 111A to de-mob sediment samples and mob for groundwater sampling.
Robert Boyd 9/4/13

T0660 Adak LTM 2013 9/4/13

1240 - PID Bump Test: 100 ppm
Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
1255	3.99	4.51	0	7.93	15.43	0.18	299
1620	4.00	4.50	0	8.16	16.31	0.20	317

1325 - A. Lewis & R. Boyd on site 08-200 (ROICC). Conduct physical hazard survey, no hazards observed. PID Breathing Zone: 0.0 ppm, well head: 0.0 ppm.
Weather: 50°F, Sun, 15 mph wind N.
1332 - Collect [DTW = 4.05 ft btoc]
1335 - Set flow rate 400 mL/min via peristaltic pump.
1337 - Collect water quality parameters listed on purge form (water sampling log).
1352 - Parameters stabilize: Purge 1.5 gal, pH - 6.46, SC - 1.14 mS/cm, Turb - 0 NTUs, DO - 2.90 mg/L, Temp - 10.29°C, Sal - 0.06%, ORP - -25 mV. Clear water, no odors.
1400 - Collect sample 08-200-2013 (MS/MSD)
• 9-40mL amber VOA w/ HCl Benzene (8260C)
Also complete Monitoring Well Gauging Visual Inspection Checklist: DTB = 16.17 ft btoc (Soft)
Relinquished 9/4/13

T0660 Adak LTM 2013 9/4/13

1425 - A. Lewis & R. Boyd on site 08-202 (ROICC). Conduct physical hazard survey, no hazards observed. PID Breathing Zone: 0.0 ppm, wellhead: 0.0 ppm. Collect [DTW = 2.70 ft btoc]
DTB = 14.77 ft btoc (soft bottom).
Monument has light surface rust.
~~1500 - A. Lewis & R. Boyd~~ RB 9/4/13
Monitoring Well Gauging Visual Inspection Checklist completed.
1500 - A. Lewis & R. Boyd on site 111A to de-mob & QC paperwork.
SWMU11, Palisades Landfill Photo Log

Date	Time	Description
9/4/13	0913	Andy & Sherri Sampling 102
9/4/13	0930	102 (Sed location) facing north
9/4/13	0930	102 (Sed location) facing west
9/4/13	0930	102 (Sed location) close-up
9/4/13	0955	103 (Sed location) facing east
9/4/13	0955	103 (Sed location) close-up
9/4/13	1127	101 (Sed location) facing south
9/4/13	1127	101 (Sed location) close-up

1900 - End of day.

Relinquished 9/4/13

TOOO Adak LTM 2013 9/5/13

0630 - Prep paperwork.

0700 - On site office. Conduct tailgate Health & Safety briefing. See SSHO logbook.

Topics include:

- Slips, trips, & falls
- Proper PPE
- Traffic hazards

Discuss work plan.

0740 - Mob sample van.

PID Bump Test: 101 ppm

Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0750	3.99	4.49	0	7.68	10.73	0.18	337
1230	4.01	4.50	0	8.34	11.48	0.19	301
1815	4.01	4.50	0	9.07	11.57	0.20	295

0815 - A. Lewis & R. Boyd on site 08-202 (ROICC). Conduct physical hazard survey, no hazards observed. PID Breathing Zone: 0.0 ppm, wellhead: 0.0 ppm

Weather: 48°F, 5 mph wind S, clear

0825 - Collect [DTW = 2.79 ft btoc]

0830 - Set flow rate: 400 mL/min via peristaltic pump.

Robert Boyd 9/5/13

TOOO Adak LTM 2013 9/5/13

0833 - Collect water quality parameters listed on water sampling log.

0858 - Parameters stabilize: Purge 2.5 gal, pH - 6.54, SC - 0.820 mS/cm, Turb - 0 NTUs, DO - 0.50 mg/L, Temp - 6.94 ~~mS/cm~~ °C, Sal - 0.04%, ORP - -98 mV. Clear odorless water. RB 9/5/13

0900 - Collect sample 08-202-2013

- 3-40 mL amber VOA w/HCl Benzene (8260C)

Inspection completed 9/4/13

0940 - A. Lewis, R. Boyd on site MRP-MW8 (SA79). Conduct physical hazard survey, no hazards observed. PID Breathing zone: 0.0 ppm, wellhead: 0.0 ppm.

Weather: 50°F, 5 mph wind S, clear

0944 - Collect [DTW = 10.11 ft btoc].

0946 - Set flow rate: 400 mL/min via peristaltic pump.

0949 - Collect water quality parameters listed on water sampling log.

1004 - Parameters stabilize: Purge 1.5 gal, pH - 6.20, SC - 0.332 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp - 6.55°C, Sal - 0.02%, ORP - -47 mV, clear water, light sulfur.

Robert Boyd ~~9/5/13~~ RB 9/5/13 9/5/13

T0606 Adak LTM 2013 9/5/13

1005 - Collect sample MRP-MW8-2013.
• 2-1L amber w/HCl DRO (AK102)
1010 - Collect sample MRP-MW8-2013 (Dup)
• 2-1L amber w/HCl DRO (AK102)
Also complete Monitoring Well Gauging Visual Inspection Checklist:
DTB = 16.10 ftbtoc
1025 - A. Lewis & R. Boyd on site 02-230 (SA79). Conduct physical hazard survey, no hazards observed.
PID Breathing Zone: 0.0ppm, wellhead: 0.0ppm
Weather: 51°F, 5mph winds.
1035 - Collect [DTW = 11.44 ft btoc]
1037 - Set flow rate: 400mL/min via peristaltic pump.
1040 - Collect water quality parameters listed on water sampling log.
1100 - Parameters stabilize: Purge 2.0 gal.
pH-6.22, SC-0.577mS/cm, Turb-0 NTUs, DO-0.00 mg/L, Temp 7.95°C, Sal-0.03%, ORP-33mV. Clear, odorless water.
~~1100~~ RB 9/5/13 1110 - Collect sample 02-230-2013
• 2-1L amber w/HCl DRO (AK102)
Also complete Monitoring Well Gauging Visual Inspection Checklist: DTB = 18.94 ftbtoc (solid bottom)

Robert Boyd 9/5/13

T0606 Adak LTM 2013 9/5/13

1120 - A. Lewis & R. Boyd on site 111A to pack samples for Alaska Air shipment via Goldstreak to ALS & pack faulty Horibas (2) and PID for shipment to Argus-Hazco (TRS) via Goldstreak.
1320 - A. Lewis, R. Boyd, B. Schleiser on site Alaska Air Shipping 7 coolers (342 lbs total) to ALS AWB# 8288 7781 and 3 pieces of equipment to Argus Hazco (TRS) (totaling 63 lbs) AWB # 8288 7862.
1620 - A. Lewis & R. Boyd on site 601 (SA79). Conduct physical hazard survey, observed one piece of sheet metal on ground in line between MRP-MW8 and 601, ~ 10 ft from MRP-MW8.
PID Breathing Zone: 0.0ppm
Well head: 0.0 ppm
Weather: 53°F, sun.
1630 - Collect [DTW = 11.03 ftbtoc]
1640 - Set flow rate: 400mL/min via peristaltic pump.

Robert Boyd 9/5/13

T0606 Adak LTM 2013 9/5/13

1642 - Collect water quality parameters listed on water sampling log.

1657 - Parameters stabilize: Purge 1.5 gal, pH - 6.07, SC - 0.317 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp - 9.20°C, Sal - 0.01%, ORP - -84 mV

Clear, odorless water.

1710 - Collect sample 601-2013

- 2-1L amber w/HCl DRO (AK 102)

Also complete Monitoring Well Gauging Visual Inspection Checklist:

PTB = 17.99 ft btoc.

1745 - A. Lewis & R. Boyd on site

111A. De-mob & QC paperwork.

1830 - ROICC Photo Log

Date	Time	Description
9/5/13	0853	08-200 facing southeast
9/5/13	0901	08-202 facing west
~~9/5/13~~	~~1032~~	~~MRP-MW8 facing northwest~~
~~9/5/13~~	~~1109~~	~~02-230 facing southeast~~

JCB 9/5/13

SA79, Main Road Pipeline Photo Log

Date	Time	Description
9/5/13	1032	MRP-MW8 facing northwest
9/5/13	1109	02-230 facing southeast
9/5/13	1706	601 facing west

1900 - End of day

RalphBoyd 9/5/13

T0606 Adak LTM 2013 9/6/13

0700 - On site office. Conduct tailgate Health & Safety briefing.

See SSHO logbook.

Topics include:

- Slips, trips, & falls
- Proper PPE
- Product handling
- Bunker hazards

Discuss work plan & QC topics

0740 - Mob sample van.

PID Bump Test: 100 ppm

Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0750	3.98	4.51	0	8.06	11.53	0.18	317
1140	3.99	4.50	0	8.93	11.98	0.19	303
1915	4.00	4.51	0	9.01	12.00	0.17	260

1205 - A. Lewis, R. Boyd, & S. Wunderlich on site NL-04 (SWMU 61).

Conduct physical hazard survey, previously observed holes along access to location.

Weather: 53°F, partial sun, 5 mph wind S.

1210 - Collect water quality parameters listed on water sampling log:

RalphBoyd 9/6/13

1210 cont....
pH - 6.21, SC - 0.119 mS/cm, Turb - 1 NTUs, DO - 7.89 mg/L, Temp - 9.98°C, Sal - 0.06%, ORP - 82 mV. No odor, clear water.
~~Coll~~ RB 9/6/13

1215 - Collect surface water sample
NL-04-2013 (MS/MSD on GRO only)
- 9 - 40mL amber VOA w/HCl GRO (AK101)
- 3 - 40mL amber VOA w/HCl BTEX (8260C)
- 2 - 1L amber u/p PAHs (17) (8270D SIM)

Also complete Surface Water Sampling Visual Inspection Checklist. No sheen or visible contamination. Stream size ~30 ft wide x 4 ft deep.

1230 - Collect sediment sample
NL-04S-2013
- 2 - 4oz tared amber w/surrogated Meoh GRO (AK101)
- 2 - 4oz tared amber w/non-surrogated Meoh BTEX (8260C)
- 2 - 2oz clear Dry Weight.

Also complete Sediment Sampling Visual Inspection Checklist: Dark brown, silty clay w/organics (roots). Worms & snail present in sediment.

Rabut Bzd 9/6/13

1300 - Collect sediment sample
NL-14S-2013 (Dup)
- 2 - 4oz tared amber w/surrogated Meoh GRO (AK101).
- 2 - 4oz tared amber w/non-surrogated Meoh BTEX (8260C)
- 2 - 2oz clear Dry Weight.

1310 - Complete Seep & Shoreline Visual Inspection Checklist: SWMU 61 No visible evidence of petroleum contamination observed. Extensive areas of shallow ponded water adjacent to stream.

1500 - A. Lewis & R. Boyd on site
05-735 (SWMU 17, Power Plant No. 3)
Conduct physical hazard survey, observed multiple hazards including a leaking 55 gallon drum and a yellow 55 gallon poly drum (Hazardous Substance (MSDS #C03 #045)). See inspection form for site conditions around well.

1510 - Collect [DTW = 15.84 ft btoc]

Rabut Bzd 9/6/13

T066 Adak LTM 2013 9/6/13

1512 - Set flow rate: 400mL/min via peristaltic pump

1517 - Collect water quality parameters listed on water sampling log.

1547 - Parameters do not stabilize. Purge 3 times casing volume: Purge 3.0 gal, pH - 6.40, SC - 0.275 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp 6.94°C, Sal - 0.01%, ORP - -32 mV. Clear odorless water.

1550 - Collect sample 05-735-2013
- 3-40mL amber VOA w/HCl VOCs PCE + daughters (8260c).

1600 - Collect sample 05-745-2013 (Dup)
- 3-40mL amber VOA w/HCl VOCs PCE + daughters (8260c)

1700 - Locate wells at SWMU 14 and SWMU55 for future sampling & inspections.

1715 - On site 111A to de-mob & QC paperwork.

SWMU 61, Tank Farm B Photo Log

Date	Time	Description
9/6/13	1249	NL-04 (sed location) sample close-up

Robert Bed 9/6/13

T066 Adak LTM 2013 9/6/13

1715 cont....

Date	Time	Description
9/6/13	1251	NL-04 (sed location) close-up
9/6/13	1252	NL-04 (sed location) facing south
9/6/13	1255	NL-04 (SW location) facing south
9/6/13	1718	SWMU 61 Shoreline Inspection Photos (7)

SWMU 17, Power Plant No. 3 Photo Log

Date	Time	Description
9/6/13	1601	05-735 facing west
9/6/13	1511 - 1559	05-735 Site Conditions (15)
9/6/13	1511	Leaking Drum at 05-735 (3)
9/6/13	1511	Leaking Drum at 05-735 close-up

Site conditions and leaking drum photos in sub-folder titled "05-735 Site Conditions".

1930 - End of day.

Robert Bed 9/6/13

T066 Adak LTM 2013 9/7/13

0700 - On site office. Conduct tailgate Health & Safety briefing. See SSHO logbook.
Topics include:
- Slips, trips, & falls
- Proper PPE
- Wind awareness / hazards
- Pinch-points

Discuss work plan & QC topics.

0810 - Mob sample van.
PID Bump Test: 99.8 ppm
Horiba Calibration Check

Time	PH	SC mS/cm	Turbidity	DO mg/L	Temp °C	Sal %	ORP mV
0820	3.99	4.49	0	7.12	11.84	0.17	343
1215	3.99	4.51	∅	8.27	12.05	0.19	320
NA							

0840 - Contact Poole (Vince) w/ AK DOT @ 907-572-9960 to gain access across runway to 14-100 (Runway 5-23).

0900 - A. Lewis & R. Boyd on site 14-100 (Runway 5-23). Conduct physical hazard survey, wind awareness, PID Breathing Zone: 0.0 ppm, wellhead: 0.0 ppm.

Robert Boyd 9/7/13

T066 Adak LTM 2013 9/7/13

0900 cont...
Weather: 48°F, 25mph wind NE, overcast.

0910 - Collect [DTW = 2.75 ft btoc]

0912 - Set flow rate. 400 mL/min via peristaltic pump.

0915 - Collect water quality parameters listed on water sampling log.

0935 - Parameters stabilize: Purge 2.0 gal, pH - 6.33, SC - 0.332 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp - 9.01°C, Sal - 0.01%, ORP - -31 mV. Clear, odorless water.

0940 - Collect sample 14-100-2013
- 3-40 mL amber VOA w/ HCl GRO (AK 101)

1100 - On site Bunker to transfer CERCLA site (SWMU 17) purge water to drum and dispose of PPE.

1200 - On site 111A to de-mob & QC paperwork.

Runway 5-23 Photo Log

Date	Time	Description
9/7/13	0943	14-100 facing north

1900 - End of day.

Robert Boyd 9/7/13

T0600 Adak LTM 2013 9/8/13

1200 - Pack coolers w/ samples for shipment to ALS.

1300 - On site Alaska Airlines. Ship three coolers to ALS via Goldstreak AWB #8289 6041.

1400 - On site 111A. End of day.

Robert Boyd 9/8/13

T0600 Adak LTM 2013 9/9/13

0630 - Prep paperwork.

0700 - On site office. Conduct tailgate Health & Safety briefing. See SSHO logbook.

Topics include:

- Slips, trips, & falls.
- Proper PPE
- Cold stress

Discuss day's work plan & QC topics.

0740 - Mob sample van. Horiba Calibration Check.

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0750	3.99	4.49	0	9.17	11.64	0.17	355
1310	4.01	4.48	0	8.81	12.21	0.17	332
1805	4.00	4.50	Ø	9.21	13.12	0.18	345

0835 - A. Lewis & R. Boyd on site. Fuels to sign in for access to Tank Farm for SWMU 25 sampling.

0900 - A. Lewis & R. Boyd on site RLSW01 (SWMU 25 Roberts Landfill). Sample location is dry, no sample collected (RLSW01-2013). Vegetation growing at location. No signs of wildlife. No odors.

Robert Boyd 9/9/13

0900 cont...
Conduct physical hazard survey, no hazards observed. Complete Inspection.
1030 - A. Lewis & R. Boyd on site
NL-14 (SWMU 25, Roberts Landfill).
Conduct physical hazard survey, no hazards observed.
Weather: 50°F, 5-10 mph wind S west, Sun.
1045 - Collect water quality parameters listed on water sampling log:
pH - 7.69, SC - 0.849 mS/cm, Turb - 9 NTUs, DO - 7.29 mg/L, Temp - 9.31°C, Sal - 0.00%, ORP - 41 mV. Clear odorless water.
1055 - Collect surface water sample
NL-14-2013
- 1-500 mL Poly w/p Alkalinity (SM2320B), Sulfate (300.0), TDS (SM2540C).
- 1-500 mL Poly w/ H_2SO_4 COD (SM5220C), TKN (ASTM D-1426-93B), Ammonia (SM4500G)
- 1-500 mL Poly w/ HNO_3 Total PP Metals (6020A/7470A), Total Aluminum (6020A)
- 1-500 mL Poly w/ HNO_3 Dissolved PP Metals (6020A/7470A), Dissolved Aluminum (6020A) (F)

R. Boyd 9/9/13

1055 cont...
Also complete Surface Water Sampling Visual Inspection Checklist. No petroleum odors at sample location, or surrounding areas. Visible contamination in or on water. Water at sample location clear at surface w/ some black particulate floating in water. Milky white fluid w/ orange to light brown stain below surface of water. Concentrated blue-green tinted milky substance seeping from upgradient hillside (~4 ft up gradient from sample location) entering surface water sampling location and diluting to a milky white to milky brown color. Located another blue-green tinted milky substance seep ~ 20 ft down gradient from NL-14 w/ actively flowing clear water seep ~ 2 ft away. Faint seep flow at time of sample collection. See field form & photo log. Vegetation looks unhealthy.

R. Boyd 9/9/13

T0606 Adak LTM 2013 9/9/13

1140 - A. Lewis & R. Boyd on site
RLSW02 (SWMU 25 Roberts Landfill)
Conduct physical hazard survey.
no hazards observed. Walked to
location, as heavy erosion has
washed out much of the road.
Surface water location dry.
Did not collect surface water
sample RLSW02-2013. Inspection complete.
1245 - Sign out from Fuels.
1420 - A. Lewis & R. Boyd on site
RLSW03 (SWMU 25, Roberts Landfill).
Conduct physical hazard survey, no
hazards observed. Weather: 54°F,
5 mph wind W, Sun.
1430 - Collect water quality parameters
listed on water sampling log:
pH-4.84, SC-0.537 mS/cm, Turb-17 NTUs,
DO-7.88 mg/L, Temp-9.51°C, Sal-0.00%,
ORP-210 mV. Clear, odorless water.
1435 - Collect surface water sample
RLSW03-2013
- 3-40mL amber VOA w/HCl VOCs (36) (8260C)
- 1-500mL poly w/H_2SO_4 COD (SM5220C),
TKN (ASTM D1426-93B, & Ammonia (SM4500G)

Relinquished 9/9/13

T0606 Adak LTM 2013 9/9/13

1435 cont...
- 1-500mL poly w/HNO_3 Total PP Metals
(6020A/7470A) Total Aluminum (6020A).
- 1-500mL poly u/p Alkalinity (SM2320B),
Sulfate (300.0), TDS (SM2540C).
- 1-500mL poly w/HNO_3 Dissolved PP Metals
(6020A/7470A) Dissolved Aluminum (6020A) (F)

1445 - Collect sample RLSW13-2013 (Dup)
- 1-500mL poly w/H_2SO_4 COD (SM5220C),
TKN (ASTM D1426-93B), Ammonia (SM4500G)
- 1-500mL poly u/p Alkalinity (SM2320B),
Sulfate (300.0), TDS (SM2540C).

Also complete inspection:
Observed roofing material from
Bldg. 1827 ~ 10ft from sample
location in water body, but not
likely affecting sample.
1525 - A. Lewis & R. Boyd on site
RLSW04 (SWMU 25, Roberts Landfill).
Conduct physical hazard survey,
no hazards observed. Weather: 54°F,
5 mph wind W, Sun.
1534 - Collect water quality parameters
listed on water sampling log: pH-6.21,
SC-0.421 mS/cm, Turb-5 NTUs, DO-8.44 mg/L

Relinquished 9/9/13

T066 Adak LTM 2013 9/9/13

1534 cont...

Temp - 10.61°C, Sal - 0.00%, ORP - 125 mV. Clear, odorless water.

1545 - Collect sample (surface water) RLSW04-2013

- 3-40mL amber VOA w/ HCl VOCs (30) (8260c)
- 1-500mL poly w/ HNO_3 Total PP Metals (6020A/7470A), Total Aluminum (6020A)
- 1-500mL poly w/ HNO_3 Dissolved PP Metals (6020A/7470A), Dissolved Aluminum (6020A) (F)
- 3-500mL poly w/ H_2SO_4 COD (SM5220C), TKN (ASTM D1426-93B), Ammonia (SM4500G) MS/MSD
- 3-500mL poly w/p Alkalinity (SM2320B), Sulfate (300.0), TDS (SM2540C) MS/MSD.

Also complete Inspection:
No visible sheen or visible contamination, No odors. Healthy vegetation nearby, Trout in water body with eagle & raven nearby. Stream size 6ft wide x 3ft deep w/ moderate flow.

1625 - A. Lewis & R. Boyd on site RLSW05-2013 (SWMU 25 Roberts Landfill). Conduct physical hazard survey, no hazards observed. Weather: 55°F, 10mph wind W, Sun.

Rahul Bhel 9/9/13

T066 Adak LTM 2013 9/9/13

1635 - Collect water quality parameters listed on water sampling log: pH - 6.14, SC - 0.250 mS/cm, Turb - 0 NTUs, DO - 8.21 mg/L, Temp - 13.01°C, Sal - 0.00%, ORP - 191 mV. Clear, odorless water.

1645 - Collect surface water sample RLSW05-2013

- 3-40mL amber VOA w/ HCl VOCs (30) (8260c)
- 1-500mL poly w/ H_2SO_4 COD (SM5220C), TKN (ASTM D1426-93B), Ammonia (SM4500G)
- 1-500mL poly w/ HNO_3 Total PP Metals (6020A/7470A), Total Aluminum (6020A)
- 1-500mL poly w/p Alkalinity (SM2320B), Sulfate (300.0), TDS (SM2540C)
- 1-500mL poly w/ HNO_3 Dissolved PP Metals (6020A/7470A), Dissolved Aluminum (6020A) (F)

Also complete Inspection:
No sheen or visible contamination. No odor. Stream size 2ft wide x 8" deep, good flow. Healthy grass along shoreline. Raven nearby.

1715 - On site 111A. De-mob and QC paperwork.

Rahul Bhel 9/9/13

T0606 Adak LTM 2013 9/9/13

1715 cont...

SWMU 25 Roberts Landfill Photo Log

Date	Time	Description
9/9/13	0914	RLSW01 (SW location) facing south
9/9/13	0915	RLSW01 (SW location) close-up
9/9/13	1108	NL-14 (SW location) facing southwest
9/9/13	1108	NL-14 (SW location) close-up
9/9/13	1328-1332	NL-14 Blue-Green Substance (10)
		- in sub-folder "NL-14"
9/9/13	1145	RLSW02 (SW location) facing west
9/9/13	1145	RLSW02 (SW location) close-up
9/9/13	1149-1157	Access Road to RLSW02 (9)
		- in sub-folder "RLSW02 Access Road"
9/9/13	1509	RLSW03 (SW location) facing southeast
9/9/13	1509	RLSW03 (SW location) facing east
9/9/13	1509	RLSW03 (SW location) close-up
9/9/13	1617	RLSW04 (SW location) facing south
9/9/13	1617	RLSW04 (SW location) close-up
9/9/13	1706	RLSW05 (SW location) facing south
9/9/13	1706	RLSW05 (SW location) facing northwest
9/9/13	1706	RLSW05 (SW location) close-up

1930 - End of day.

Robert Boyd 9/9/13

T0606 Adak LTM 2013 9/10/13

0630 - Prep paperwork.

0700 - On site office for tailgate Health & Safety briefing. See SSHO logbook. Topics include:

- Slips, trips, & falls.
- Proper PPE
- Heavy lifting
- Bunker hazards

Discuss work plan & QC topics

0730 - Mob sample van.

PID Bump Test: 100 ppm

Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0740	3.99	4.49	0	11.38	12.88	0.17	355
1200	4.00	4.51	0	9.32	12.36	0.17	322
1820	4.00	4.50	~~0~~	9.04	12.74	0.17	305

0850 - A. Lewis & R. Boyd on site NL-11 (SWMU 25 Roberts Landfill). Conduct physical hazard survey, no hazards observed. Weather: 44°F, 10 mph wind W, overcast.

0910 - Collect water quality parameters listed on water sampling log: pH - 6.69, SC - 0.384 mS/cm, Turb - 11 NTUs,

Robert Boyd 9/10/13

T066 AdaK LTM 2013 9/10/13

0910 cont--
DO-8.71mg/L, Temp-11.14°C, Sal-0.00%, ORP-105mV. Clear, odorless water.

0920 - Collect surface water sample
NL-11-2013

- 1-500mL poly w/ H_2SO_4 COD (SM5220C), TKN (ASTM D1426-93B), Ammonia (SM4500G)
- 1-500mL poly w/ HNO_3 Total PP Metals (6020A/7470A), Total Aluminum (6020A).
- 1-500mL poly u/p Alkalinity (SM2320B), Sulfate (300.0), TDS (SM2540C)
- 1-500mL poly w/ HNO_3 Dissolved PP Metals (6020A/7470A), Dissolved Aluminum (6020A) (F)

Also complete Inspection:
No sheen or visible contamination, no odors. Vegetation growing along shoreline and within stream. Stream size 14" wide x 6" deep. Slow flowing water. Eagle nearby.

0950 - A. Lewis & R. Boyd on site NL-12 (SWMU 25 Roberts Landfill). Conduct physical hazard survey, no hazards observed.
Weather: 43°F, 10 mph wind W, overcast w/ mist.

Robert Boyd 9/10/13

T066 AdaK LTM 2013 9/10/13

1000 - Collect water quality parameters listed on water sampling log: pH-6.55, SC-0.501mS/cm, Turb-0 NTUs, DO-9.11mg/L, Temp-11.33°C, Sal-0.00%, ORP-112 mV. Clear, odorless water.

1010 - Collect surface water sample.
NL-12-2013

- 1-500mL poly w/ H_2SO_4 COD (SM5220C), TKN (ASTM D1426-93B), Ammonia (SM4500G)
- 1-500mL poly w/ HNO_3 Total PP Metals (6020A/7470A), Total Aluminum (6020A)
- 1-500mL poly u/p Alkalinity (SM2320B), Sulfate (300.0), TDS (SM2540C).
- 1-500mL poly w/ HNO_3 Dissolved PP Metals (6020A/7470A), Dissolved Aluminum (6020A) (F)

Also complete Inspection:
No sheen or visible contamination. No odors. Vegetation growing along shoreline. Stream size 7ft wide x 2.5ft deep, w/ heavy flow. Eagle & Raven nearby.

1055 - A. Lewis & R. Boyd on site NL-09 (SW/Sed location) (SWMU 62 Eagle Bay). East Canal water

Robert Boyd 9/10/13

1055 cont...
level high, too high for sediment sampling & surface water very turbid. Will return when water level recedes & winds lessen. Investigate high water at East Canal. Water is also high at West Canal. Initial observations suggest West Canal pump need to be turned on. After referencing photos of West Canal Boom 4, West Canal water level appears to be within normal range. There was no apparent blockage in the culverts connecting East Canal to West Canal. Will confir with A. Franzen and return to reinvestigate.

1400 - A. Lewis & R. Boyd on site 01-153 (SWMU 14, Old Pesticide Storage). Conduct physical hazard survey, no hazards observed. PID Breathing Zone: 0.0 ppm, Wellhead: 0.0 ppm.

Robert Boyd 9/10/13

1400 cont...
Weather: 45°F, 10 mph wind W, Cloudy w/ rain.
1410 - Collect [DTW = 18.54 ft btoc]
1418 - Set flow rate: 400 mL/min via peristaltic pump.
1421 - Collect water quality parameters listed on water sampling log.
1446 - Parameters do not stabilize. purge three times casing volume: pH - 6.19, SC - 0.185 mS/cm, Turb - 11 NTUs, DO - 4.59 mg/L, Temp - 6.81°C, Sal - 0.00%, ORP - 221 mV. Clear water w/ orange particulate. No odors
1450 - Collect sample 01-153-2013 (MS/MSD)
• 12 - 40mL amber VOA w/HCl VOCs PCE + daughters (8260C)
Also complete Monitoring Well Gauging Visual Inspection Checklist:
DTB = 27.20 ft btoc (soft bottom)
1530 - A. Lewis & R. Boyd on site MW14-5 (SWMU 14, Old Pesticide Storage). Conduct physical hazard survey, no hazards observed.

Robert Boyd 9/10/13

T0606 Adak LTM 2013 9/10/13

1530 cont...
Weather: 43°F, 20 mph wind S, cloudy w/ rain. PID Breathing zone: 0.0 ppm, wellhead: 152 ppm.
1540 - Collect [DTW = 16.02 ft btoc]
1547 - Set flow rate: 400 mL/min via peristaltic pump.
1552 - Collect water quality parameters listed on water sampling log.
1622 - Parameters stabilize: Purge 3.0 gal, pH - 6.00, SC - 0.166 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp - 7.71°C, Sal - 0.00%, ORP - 2 mV, Clear water, light petroleum odor.
1630 - Collect sample MW14-5-2013
- 4-40mL amber VOA w/ HCl GRO (AK101)
- 2-1L amber w/ HCl DRO (AK102)
- 3-500mL poly w/ HNO_3 Total Lead (6020A) MS/MSD
- 3-500mL poly w/ HNO_3 Dissolved Lead (6020A) (F) MS/MSD

Also complete Monitoring Well Gauging Visual Inspection Checklist:
DTB = 23.98 ft btoc.

Robert Boyd 9/10/13

T0606 Adak LTM 2013 9/10/13

1710 - A. Lewis & R. Boyd on site MW15-3 Conduct physical hazard survey, no hazards observed. Collect [DTW = 13.54 ft btoc]
DTB = 21.60 ft btoc (soft bottom)
1740 - A. Lewis & R. Boyd on site MW15-424 (SWMU14, Old Pesticide Storage). Conduct physical hazard survey, multiple pieces of debris in vicinity including hoses, tires, metal and delapatated building w/ tyvek suits & ACM looking substance. Collect [~~DTB~~ RB 9/10/13 DTW = 18.19 ft btoc]. No odors.
DTB = 26.40 ft btoc (solid bottom)
1810 - On site 111A to de-mob & QC paperwork.

Roberts Landfill Photo Log

Date	Time	Description
9/10/13	0934	NL-11 (SW location) facing east
9/10/13	0934	NL-11 (SW location) close-up
9/10/13	1018	NL-12 (SW location) facing west
9/10/13	1018	NL-12 (SW location) close-up

Robert Boyd 9/10/13

T066 AdakLTM 2013 9/10/13

1810 cont...

SWMU 14, Old Pesticide Storage

Date	Time	Description
9/10/13	1509	01-153 facing northwest
9/10/13	1650	MW14-5 close-up
9/10/13	1702	MW15-3 facing north
9/10/13	1718	MW15-424 facing west.

1930 - End of day.

Relinquished 9/10/13

T066 AdakLTM 2013 9/11/13

0700 - Prep paperwork.

0800 - On site office. Conduct tailgate Health & Safety briefing. See SSHO logbook.

Topics include:

- Slips, trips, & falls
- Wind hazards
- Proper PPE
- Bunker hazards

Discuss work plan & QC topics.

0830 - MOB sample van.

PID Bump Test: 99.9 ppm

Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0840	3.99	4.51	0	8.81	10.32	0.17	301
1420	4.00	4.49	0	9.31	11.03	0.17	347
NA							

0940 - A. Lewis, R. Boyd, & S. Keehan on site NL-09 (SWMU 62) to further investigate high water in East Canal.

1000 - A. Lewis & R. Boyd on site 55-145 (SWMU 55). Conduct physical hazard survey, multiple pieces of debris nearby.

Relinquished 9/11/13

1000 cont....
PID Breathing Zone: 0.0 ppm, well head: 0.0 ppm. Weather: 45°F, 20 mph wind NW, overcast w/ rain.
1010 - Collect [DTW = 16.95 ft btoc]
1013 - Set flow rate 400 mL/min via peristaltic pump.
1016 - Collect water quality parameters listed on water sampling log.
1036 - Parameters stabilize: 2.0 gal, pH - 7.02, SC - 0.239 mS/cm, Turb - 0 NTUs, DO - 5.25 mg/L, Temp - 7.52 °C, Sal - 0.00%, ORP - 138 mV. Clear, odorless water.
1045 - Collect sample 55-145-2013
• 4-40mL amber VOA w/HCl VOCs (PCE+ daughters) (8260c)
Also complete Monitoring Well Gauging Visual Inspection Checklist:
DTB = 25.61 ft btoc (solid bottom).
1100 - A. Lewis & R. Boyd on site 55-146 (SWMU 55). Conduct physical hazard survey, no hazards observed. PID Breathing Zone: 0.0 ppm well head: 0.0 ppm
Relinquished 9/11/13

1100 cont...
Weather: 45°F, 20 mph wind NW, overcast w/ rain.
Collect [DTW = 17.64 ft btoc]
DTB = 27.94 ft btoc (solid bottom)
3 bollards present. One bollard is bent, likely hit by vehicle.
1120 - On site NL-09 (SWMU 62). S. Keehan said pump in West Canal has been turned on. Set stake at NL-09 to gauge water level.
1215 - A. Lewis & R. Boyd on site SWMU 25 Roberts Landfill. Identified well for potential future decommissioning, see pg 152 for details.
1245 - On site Bunker to transfer CERCLA purge water to CERCLA drum and dispose of PPE.
1320 - A. Lewis & R. Boyd on site NL-09 (SWMU 62). Water level in East Canal appears to have decreased by ~1/4", but may be
Relinquished 9/11/13

T066 Adak LTM 2013 9/11/13

1320 cont...
attributable to wind activity.
Will return to reassess.
Confirmed that pump at West Canal is on.

1400 - A. Lewis & R. Boyd on site
111A. De-mob & QC paperwork.
SWMU 55 Photo Log

Date	Time	Description
9/11/13	0956	55-145 facing northeast
9/11/13	1057	55-146 facing northwest

SWMU 62 Photo Log

9/11/13	0942	NL-09 High Water at East Canal (3)

1900 - End of day.

Reviewed 9/11/13

T066 Adak LTM 2013 9/12/13

0700 - QC paperwork,
prep paperwork.

0900 - On site, office. Discuss work plan & QC topics.
Conduct Health & Safety briefing.
See SSHO logbook.
Topics include:
- Slips, trips, & falls
- Proper PPE
- Bunker hazards
- Housing break-ins reported 9/11/13 at USA Environmental units.

1000 - On site NL-09 (SWMU 62) to assess water level of East Canal. Water level has dropped ~1" according to stake gauge. Verified that pump at West Canal was on. Confirmed w/ A. Franzen to hold off on collecting surface water and sediment samples at NL-09 until East Canal water level receded or A. Franzen

Reviewed 9/12/13

T066 Adak LTM 2013 9/12/13

1000 cont...
directs to proceed.
1030 - On site 111A to QC paperwork, de-mob, & pack samples for shipment to ALS via Alaska Air Goldstreak.
1300 - A. Lewis & R. Boyd on site Alask Airlines to ship 9 coolers via Goldstreak (AWB# 7007 9111) to ALS and one interface meter to TTT via Goldstreak (AWB# 7007 9122).
1400 - On site 111A, continue demob.
1500 - End of day.

Relinquished 9/12/13

T066 Adak LTM 2013 9/13/13

0900 - On site office. Discuss days work plan & QC topics. Conduct tailgate Health & Safety briefing. See SSito logbook. Topics include:
- Slips, trips, & falls
- Proper PPE
- Bunker hazards

0930 - Continue de-mob.
1100 - A. Lewis & R. Boyd on site NL-09 (SWMU62), water level in East Canal has receded ~ 8" total. Needs to recede another 4-6" to expose sediment for sample collection.
1220 - Contacted Tina Romberg 907-577-2033 at TDX regarding leaking drum near 05-735 (SWMU17, Power Plant No. 3). Tina states that the drum does not belong to TDX, and that it is likely the Aleut Corps. or the City of Adak
1320 - R. Boyd, A. Lewis, & S. Skeehan (NTR) on site 05-735 (~~SMU~~ SWMU17. RBB 9/13/13

Relinquished 9/13/13

1320 cont...
Power Plant No. 3) to allow S. Skeehan to photo document leaking drum.
1328 - On site West Canal Pump. confirmed pump is on.
1333 - On site NL-09 (SWMU 62). East Canal water level has not receded since visit at 1100.
1340 - On site City Hall, A. Lewis, R. Boyd, & S. Skeehan discuss leaking drum near 05-735 (SWMU 17, Power Plant No. 3). Leyton Lockett (City Manager) 907-592-4500 said City crew will pick-up drum on 9/13/13 or 9/16/13 and remove from site. Drum will go to City Shop and be recontainerized or burned.
2115 - A. Lewis & R. Boyd on site NL-09 (SWMU 62). East Canal water level has receded ~2" from 1333 visit.
2130 - End of day.

Robert Boyd 9/13/13

0800 - On site 111A, conduct tailgate Health & Safety briefing.
Topics include:
- Slips, trips & falls
- Proper PPE
- Bunker hazards

0815 - On site NL-09 (SWMU 62) East Canal water level has not changed since 2130 visit on 9/13/13. West Canal pumps are off.
0900 - Continue de-mob.
1130 - R. Boyd & S. Skeehan on site East Canal to ~~investigate~~ RB 9/14/13 investigate high water in East Canal. East Canal water still too high for sediment sampling at NL-09 (SWMU 62)
1200 - Continue de-mob.
~~1600~~ RB 9/14/13 1400 End of day.

Robert Boyd 9/14/13

T066 Adak LTM 2013 9/15/13

0800 - On Site 111A. Mob for day's work. Conduct tailgate Health & Safety briefing. ~~Topics~~ RA 9/15/13
Topics include:
- Slips, trips, & falls
- Proper PPE

0830 - Continue mob.
Horiba Calibration Check

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0845	3.99	4.52	0	8.94	12.59	0.19	315
1200	3.99	4.51	0	9.03	12.74	0.19	328

0945 - A. Lewis & R. Boyd on site NL-09 (SWMU 62). Conduct physical hazard survey, wear PFD along East Canal. Weather: 42°F, 15 mph wind S, overcast. Water level still high, pumps at West Canal still off.

0955 - Collect water quality parameters listed on water sampling log: pH - 6.54, SC - 0.622 mS/cm, Turb - 49 NTUs, DO - 8.01 mg/L, Temp - 9.22°C, Sal - 0.00%, ORP - 89 mV. Moderate petroleum odor, slight white cloudy water due to wind activity.

Robert Boyd 9/15/13

T066 Adak LTM 2013 9/15/13

1000 - Collect surface water sample NL-09-2013.
- 5-40mL amber VOA w/HCl GRO (AK101)
- 5-40mL amber VOA w/HCl BTEX (8260C)
- 2-1L amber w/HCl DRO (AK102)
- 2-1L amber u/p PAHs (17) (8270D SIM)

1030 - Collect surface water sample NL-19-2013 (Dup)
- 5-40mL amber VOA w/HCl GRO (AK101)
- 5-40mL amber VOA w/HCl BTEX (8260C)
- 2-1L amber u/p PAHs (17) (8270D SIM)

Also complete Surface Water Sampling Visual Inspection Checklist: Sheening along surface water, moderate petroleum odor. Approx. 75ft upgradient from sample location there is a black staining area (3ft x 100ft) behind Boom 8. Stream size ~40ft wide x ~12" deep.

1105 - Did not collect sediment sample NL-09S-2013, as East Canal water level still too high. Sediment not exposed.

1130 - On site 111A, de-mob and

Robert Boyd 9/15/13

T0606 Adak LTM 2013 9/15/13

1130 cont...
pack samples for shipment to ALS
1315 - A. Lewis, R. Boyd, & B. Schleiger on site Alaska Airlines.
Ship 2 coolers (104 lbs) containing SW sample & waste characterization samples to ALS via Goldstreak AWB# 8178 9842, ship 11 items to TRS Argus Hazco (203 lbs) via Goldstreak AWB# 8179 0052, and ship 31 coolers containing old bottles, foam, & empty coolers to ALS (350 lbs) via Priority AWB# 8179 0015 (on hold until 9/19/13).
1400 - On site 111A. QC Paperwork
1630 - On site Alaska Air to drop off departing crew.
1730 - End of day.

Robert Boyd 9/15/13

T0606 Adak LTM 2013 9/16/13

0900 - On site office. Conduct tailgate Health & Safety Briefing. See SSHO logbook.
Topics include:
- Slips, trips, & falls
- Bunker hazards
- Heavy lifting

1145 - A. Lewis & R. Boyd on site 05-735 (SWMU 17, Power Plant No. 3). Leaking drum still on site. Drum has been lifted upright so that leaking bottom is upward facing and bung top was facing downward.
1230 - On site 111A.
SWMU 17 Leaking Drum Photo Log

Date	Time	Description
9/16/13	1149	Drum upright facing northwest
9/16/13	1149	Drum upright facing north
9/16/13	1149	Drum upright close-up

- in SWMU 17 → 05-735 Site Conditions → Leaking Drum Follow-up

1500 - On site NL-09 (SWMU 62), sediment location still flooded, not able to collect sample.

Robert Boyd 9/16/13

T066 Adak LTM 2013 9/16/13

1530 - On site 111A, continue de-mob.

1700 - End of day.

[signature] 9/16/13

T066 Adak LTM 2013 9/17/13

0900 - On site ~~111A~~ RB 9/17/13 office. Conduct tailgate Health & Safety briefing. See SSHO logbook. Topics include:

- Slips, trips, & falls
- Proper PPE
- Bunker hazards

1000 - R. Boyd, S. Wunderlich on site East Canal. Water level in East Canal still too high to collect sediment sample at NL-09.

1030 - On site 111A. Continue de-mob on vans & equipment.

SWMU 62 Photo Log

Date	Time	Description
9/15/13	1056	NL-09 (SW location) facing west
9/15/13	1057	NL-09 (SW location) close-up

- Also see SWMU 62, Eagle Bay → East Canal High Water Folder for East Canal conditions

Former Power Plant, Bldg T-1451 Photo Log

9/17/13	1011	NL-08 (Sed location) close-up (2)
9/17/13	1012	NL-08 (Sed location) close-up (3)
9/17/13	1022	NL-08 (SW location) close-up

[signature] 9/17/13

T066 Adak LTM 2013 9/17/13

1700 - End of day

Robert Boyd 9/17/13

T066 Adak LTM 2013 9/18/13

0900 - On site office. Conduct tailgate Health & Safety briefing. See SSHO logbook.
Topics include:
- Proper PPE
- Heavy lifting (buddy system)
- Slips, trips, & falls.

0930 - Continue de-mob. Inventory supplies.

1050 - A. Lewis & R. Boyd on site City Hall to meet w/ Leyton Lockett about SWMU 17 leaking drum being placed upright, but still on site and ask about several 100 gal poly drums of waste oil w/o lids at City Shop, as per Aaron Vernik (NAVFAC RPM). Leyton Lockett will look into both issues.

1120 - On site 111A. continue de-mob and inventory (see Excel file "Adak Inventory 09182013".

1800 - End of day.

Robert Boyd 9/18/13

No further entries

Calculated 9/18/13

TO66 ADAK LTM 2013 10/25/13

0800 - AT 111A FOR HEALTH + SAFETY MEETING.
A. LEWIS, J. HIGHSTONE, TOPICS DISCUSSED:
SLIPS, TRIPS, FALLS, UNEVEN GROUNDS,
PROPER PPE INCLUDING LIFE JACKETS,
CAUTION AROUND WATERWAYS, COLD
STRESS, SAMPLE HANDLING.
WEATHER - WINDS NNE 5-15MPH IN AM
INCREASING UP TO 25MPH GUSTS IN
AFTERNOON.

0910 - UNPACK, INVENTORY, INSPECT LAB SUPPLIES.
MORE SUPPLIES AND SAMPLES FOR NL-04.

1015 - ONSITE AT SWMU 61 NL-04 SEDIMENT
LOCATION FOR RESAMPLE.

1050 - AT 111A TO RECHECK SAMPLE BOTTLES
DUE LAB SHIPPER DISCREPANCIES.

1115 - BACK ONSITE AT SWMU 61 FOR SAMPLING.
SAMPLES COLLECTED:
(4) EA NL-045-2013-R GRO AK101 @ 1120 AM
(2) EA NL-045-2013-R DRY WEIGHT @ 1120 AM
(2) EA NL-145-2013-R GRO AK101 @ 1140 AM
(2) EA NL-145-2013-R DRY WEIGHT @ 1140 AM

1155 - AT UNIT FOR DEMOBE, PREP AND PACK
SAMPLES FOR SHIPMENT.

1300 - END OF DAY FOR NL-04 SAMPLING

10/25/13

Rite in the Rain®

ALL-WEATHER

JOURNAL

Nº 390N

T086 AdaKLTM 2013

TEAM 2 OUA

Start: 8/22/13

End: 9/14/13

Book #2 - Team 2
Project: Adak LTM 2013
Contract # N44255-09-D-4005
Task Order # 66
Navy Installation: Former Naval Complex Adak, AK
Site Name: OU A
Start Date: 8/22/2013
End Date: 9/15/2013
Book Assignment: Team 2
Don Balmer
Elle Roelofs
Company: Sealaska Environmental Services
Address: 18743 Front St NE, Ste. 201
Poulsbo, WA 98370
Phone #: 360-930-3300

Reviewed by: [illegible]

Date Reviewed: 12-18-13

Team 2 Adak LTM 2013

Don Balmer
Elle Roelofs

Start Date:
Aug 22, 2013
End Date
Sept. 15, 2013

ABF
12-18-13

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Don Balmer

Rite in the Rain
ALL-WEATHER WRITING PAPER

ALL-WEATHER
JOURNAL
FIELD BOOK

Book 2 - Team 2

Name Sealaska Environmental Services,
Team 2 Elle Roelofs & Don Balmer

Address 18743 Front Street NE Suite 201
Poulsbo WA 98370

Phone 360-930-3300

Project Adak LTM 2013 ✓
Contract # N44255-09-D-4005
Project # TO 66
Naval Installation - Former Naval Complex,
Adak Alaska
Site: OU ~~B~~ 500 ~~A~~ 22/13 Team 2

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ASF
12-18-13

Equipment List

PID Ion Science
10-01411 1111979

Pegasus Peristaltic Pump
SN# 1132517

Interface Probe - Solinst
SN# 1123799

Horiba Water Quality Meter U-5000
SN# U25GRAJJ Asset# 1117978

Interface Probe Geotech pizometer
(Sealaska owned)

ASF
12-19-13

Aug 22, 2013 Adak LTM 2013
Thurs. TO 66

1700 Crew arrives on island

Fri Aug 23, 2013

1000 Orientation
Equipment setup / bottle sorting
Tour of island facilities.

1930 End day.

Aug 24, 2013 Sat.
Sat.

1000 Equipment orientation
Van preparation
Equipment setup.
Paperwork review.

1800 End day

Don Balmer

8/24/13

August 26, 2013 Adak LTM 2013

0700 Morning meeting Bill
Health & Safety: wind hazzards, PID, slip trips falls, park into wind,
Weather W.SW 11mph wind,
Work upwind
QC Note from Snevri: add -2013 to ~~well documentation~~ ER 8/26 sample doc.

0814 Mob van
PPE: Safety glasses, steal toe boots, orang vest

0845 Horiba Calibration

Time	pH	SC ms/cm	Turb NTU	DO mg/L	Temp	Sal %	ORP mv
0851	3.86	4.49	0.0	9.89	16.02	.24%	202
1500	3.98	4.51	0.0	8.01	15.18	0.17	255
1836	3.76	3.79	0.0	10.07	14.18	0.20	279

0905 PID calibration 0.0/100 ppm
Review test kit instructions

1007 Elle R. & Don B. arrive on site

~~1030~~ 8/26 ER ~~Photo of well M~~ Former Power Plant
Photo of well MW-1451-8 ~~2013~~ ER 8/26
PID Breathing zone 0.0 ppm wellhead 0.0 ppm

1033 DTW 6.97 ft TC
Insert tubing to 11.5 ft TC

1123 Began Purging
questionable pH readings, required problem solving

Elle Roelofs 8/26/13

August 26, 2013 Adak LTM 2013

1220 Collected sample MW-1451-8-2013

1300 Compared parameters on TEAM 1 & Team 2 Horribas post sampling

1310 Collected sample for test kit
DO, CO_2, Ferrous Iron
Samples DO 1 ppm Fe^{2+} 20 ppm CO_2 90 ppm
(2) 1L Amber glass w/ HCL DRO (AK102)
(1) Alkalinity (SM 2320 B) & Sulfate (300.0)
(3) Methane (RSK 175)

Final Parameters
Time 1310 pH 5.86 cond. .239 ms/cm Turb 1.94 NTU
DO. 0.0 mg/L Temp 10.46 Salinity .01% ORP 7 mv
* Final Parameters were taken by Team 1 Horriba due to ~~questionable~~ ER 8/26 questionable parameters

1345 Pack samples and ~~return~~ ER 8/26 dispose of water to ground DTB 15.80'

1350 Return to apartment

1500 Horriba cleaned and calibrated

1525 Elle Roelofs & Don Balmer return to Former Power Plant MW-1451-5
Photo of well View East
Conduct hazzard & physical survey
PID Breathing zone 0.0 well headspace 0.0
DTW - 6.81 ft Insert 11.5 ft tubing

1600 Start purging water

Elle Roelofs 8/26/13

August 26, 2013 AdaK LTM 2013

~~1630~~ 8/26 ER Stablized Parameters

1627 pH 6.10 cond. mS/cm 0.173 Turb 0.0 NTU

DO 0.00 mg/L temp 9.72 salinity .01%

ORP -52

1635 conduct Sampling for MW-1451-5-2013

(2) DRO (AK102)

(1) Alkalinity (SM 2320B) and Sulfate (300.0)

(3) Methane (RSK 175)

1700 Start test Kits

Fe^{2+} 20 ppm DO 0 ppm CO_2 60 ppm

1720 Packaged Samples and dispose of water to ground. DTB 15.80'

~~1840~~ ER 8/26 moved to well 01-150

1740 Photo of well facing West

Conduct hazzard & physical survey

PID Breathing zone 0.0 Headspace 0.0

1750 DTW 19.84' TC

~~1850~~ ER 8/26 moved to well 01-118

Photo of well

Conduct hazzard & physical survey

PID Breathing zone 0.0 well headspace 0.0

DTW 16.55'

1800 Return to Apartment

1825 Moved sample to garage 111B

1836 final calibration of Horriba

Elk Roelofs 8/26/13

August 26, 2013 AdaK LTM 2013

Photo Log by Elk Roelofs

MW-1451-8 East 1028

1529 MW-1451-5 East

1744 01-150 West

1753 Former Power Plant Site West

1801 01-118 "Water bears" white invertabrates

1755 01-118 Top View

End of photo log

1900 End of Day

Elk Roelofs 8/26/2013

August 27, 2013 Adak LTM 2013

0700 Morning Meeting at B111
QC Report
0823 Health & Safety Report
Wind hazzards → park into wind
0835 Mob Van
0900 Calibrate Horriba

Time	pH	Sc mg/cm	Turb	DO	Temp	Sal	ORP
0900	3.70	3.81	0.0	9.51	16.30	0.20	272
1457	3.77	3.74	0.0	9.66	18.85	0.20	276
1742	3.75	3.69	0.0	9.44	18.95	0.19	279

0905 PID calibration 0.0/100ppm
0910 Tap water Check of Horriba

Time	pH	Sc mg/cm	Turb	DO	Temp	Sal	ORP
0910	6.00	0.069	0.5	7.97	19.11	0.00	208
		ER 8/27			ER 8/27		

0930 Elle Roelofs & Don Balmer arrive
on site Former Power Plant
well 01-118
PID 0.0 Breathing zone 0.0 well headspace
DTW 16.55'
Insert tubing to 23.00 ft
0950 Start purging
~~1002~~ ER 8/27 Stable parameters
1014 pH 5.88 cond. .425 Turb 8.2 DO 0.0
Temp 8.81 sal 0.02 ORP -111
Elle Roelofs 8/27/13

August 27, 2013 Adak LTM 2013

1020 Conduct Sampling 01-118-2013
(2) DRO (AK102)
(1) Alkalinity (SM2320B) and Sulfate (300.0)
(3) Methane (RSK 175)
1035 Packaged Samples
1040 Start Test Kits
DO .2ppm Fe^{2+} 45ppm (1 to 5 dilution) CO_2 200ppm
tried 10-100 CO_2 test kit > 100 results
2nd reading from 100-1000 CO_2 test kit
1110 Dispose of water to ground DTB 29.45'
1120 move to well 01-150
1130 Conduct hazzard and physical survey
PID 0.0 Breathing zone 0.0 well headspace
DTW 19.84'
1145 Begin Purging
1204 Stable parameters
pH 5.90 cond. 0.316 Turb 1.6 DO 0.0
Temp 13.28 sal 0.01 ORP -56
1220 Conduct Sampling 01-150-2013
(2) DRO (AK102)
(1) Alkalinity (SM2320 B) & Sulfate (300.0)
(3) methane (RSK 175)
1230 Package Samples
1235 Begin ~~Sample~~ Test ER 8/27/13 kits
DO 0.9ppm Fe^{2+} 35ppm CO_2 100ppm
Elle Roelofs 8/27/13

August 27, 2013 Adak LTM 2013

1240 DTB 27.03' TC
Dispose of purge water on ground
Small inverabrates white in color
found in wells 01-118 and 01-150
1250 Return to apartment
1420 Collected sample bottles from
storage for area 303
Recieved Trip Blanks from QC
1457 Calibration Check of Horriba
1500 Changed ice packs on samples
1505 E. Roelofs & D. Balmer arrive on site
Area 303 Well MW-303-33
Conduct Hazzard & Physical Survey
PID Breathing zone 0.0 wellhead space 4.7
1530 DTW 22.92 TC Photo NE
Insert tubing to intake at 25.5'
1545 Start Purging
1630 Stable Parameters
pH 5.99 cond. .263 Turb. 52.2
DO 5.02 Temp 9.57 Sal 0.01
ORP -42
Conduct Sampling MW-303-33-2013
(3) GRO (AK101)
(3) Benzene (8260C)
(1) alkalinity (SM 2320 B) & Sulfate (300.0)
(3) Methane (RSK 175)
Elle Roelofs 8/27/13

August 27, 2013 Adak LTM 2013

1700 Start test kits DO 0.00ppm Fe^{2+} 65ppm
Package bottles CO_2 100ppm
add trip blanks to cooler
1710 DTB 26.90 PVC cut down aprox 2' in 2013 repairs
Empty purge water on ground
1725 Return to Apartments
Photo Log by Elle Roelofs
1526 MW-303-33 NE
End of Photo Log
1830 Transfer Visual Inspection Checklist
to new forms
1900 End of Day

Elle Roelofs 8/27/2013

August 28, 2013 Adak LTM 2013

0700 Morning Meeting
QC Report
0740 Health & Safety Meeting
PPE: Nitriles, steel toed boots, orange vests, safety glasses
New hole discovered on 1451
Be mindful of "soft" roads
Walk questionable areas before driving
0815 Horriba Calibration Check

Time	pH	SC ms/cm	Turb NTU	DO mg/L	Temp	Sal %	ORP
0815	3.74	3.77	0.0	9.45	16.50	0.20	276
1422	3.73	3.80	0.0	9.71	12.86	0.20	269
1803	3.71	3.71	0.0	9.74	13.86	0.20	262

0818 PID Calibration 0.0/~~100~~ 101 ppm EE 8/28/13
0820 MOB VAN
0850 E. Roelofs & D. Balmer arrive on site well MW-303-32
Conduct Physical & Hazzard Survey
PID 0.0 ppm Both
0852 Photo
0854 Photo w/sign SW
0854 Photo w/sign NW
0900 DTW 24.54 TC
0920 Insert tubing to intake at 27.8'
0925 Start Purging
Elk Roelofs 8/28/13

August 28, 2013 Adak LTM 2013

0944 Stable Parameters
pH 5.95 SC .269 ms/cm Turb 0.0 NTU DO 0.0 mg/L
Temp 7.01 °C Sal 0.01 % ORP -88 mv
0950 Conduct Sampling MW-303-32-2013
(3) GRO (AK101)
(3) Benzene (8260C)
(3) Methane (RSK 175)
(2) DRO (AK102)
(1) Alkalinity (2320B) sulfate (300.0)
1040 Test Kits
DO 0.0 ppm Fe^{2+} 75 ppm CO_2 75 ppm
Package Bottles
1050 DTB 31.10 TC
Empty Purge Water on ground
1056 Move to well 04-211
1101 Photo Top view
Conduct hazard and physical safety survey
DTW 24.08 ~~TC~~ EE 8/28 TC
PID 0.0 Both
1115 Insert tubing at intake 27.17'
1120 Start Purging
1142 Stable Parameters
pH 6.07 SC .312 ms/cm Turb 0.2 NTU
DO 0.6 mg/L Temp 7.80 °C ORP -61 mv
1150 Conduct Sampling 04-211-2013
Elk Roelofs 8/28/13

August 28, 2013 Adak LTM 2013

(3) GRO (AK 101)
(3) Methane (RSK 175)
(1) alkalinity (2320 B) sulfate (300.0)
Total = 7 sample bottles
1200 Start Test Kits
DO 0.5 ppm Fe^{2+} 30 ppm CO_2 50 ppm
Package Bottles
DTB 30.15' TC
Dispose of purge water on ground
1220 Return to apartments
1422 Horriba Calibration Check
1440 Arrive at well MW-303-31 ER DB
1442 Photo West
PID 0.0 ppm Breathing zone 2.7 ppm wellhead
DTW 27.70' TC
1447 walk to well MW-303-38
Conduct physical and hazard survey
PID 0.0 ppm Breathing zone 9.6 ppm wellhead
1450 Photo West DTW 25.4' ER 8/28/13
1500 Return to well ~~MW-303-38~~
MW-303-31
Conduct physical and hazard survey
1515 Insert tubing at intake 31.6'
1517 Start purging
1606 Stable parameters

Elle Roelofs 8/28/2013

August 28, 2013 Adak LTM 2013

pH 5.63 Cond. 0.135 mS/cm Turb 0.0 NTU
DO 0.00 mg/L Temp 7.31° Sal 0.01% ORP 33 mV
1610 Start Sampling MW-303-31-2013
(3) GRO (AK101)
(3) BTEX (8260C)
(2) Dibenz(a,h) anthracene (8270D SIM)
(1) Total Lead (EPA 6020 A)
(1) Dissolved Lead (EPA 6020A)
(1) Alkalinity (2320B) Sulfate (300.0)
(3) Methane (RSK 175)
1700 Test Kits DO 1.5 ppm Fe^{2+} 2 ppm CO_2 32 ppm
Package Bottles
1725 DTB 34.10' TC
1730 Dispose of purge water on ground
1737 Move to Area 1451 to retake photos
1740 Photo MW-1451-8 NE
1741 Photo MW-1451-5 NE
1745 Return to Apartments
1803 Calibrate Horriba
1805 Pitoto Log by Elle Roelofs
0854 MW-303-32 SW
0854 MW-303-32 NW
1101 04-211 Topview
1442 MW-303-31 W
1450 MW-303-38 W

Elle Roelofs 8/28/2013

August 28, 2013 Adak LTM 2013

1741 MW-1451-8 NE
1742 MW-1451-5 NE
1900 End of Day

Elli Roelofs 8/28/2013

August 29, 2013 Adak LTM 2013

0700 Morning Meeting
QC Report
0735 Health and Safety
PPE: Safety glasses, nitriles, steel toed boots, safety vest
0810 Calibrate Horriba Check

Time	pH	SC mS/cm	Turb NTU	DO mg/L	Temp °C	Sal %	ORP
0810	3.70	3.76	0.0	9.59	13.52	0.20	267
1200	3.71	3.74	0.0	10.01	11.52	0.20	272

PID Calibration 0.0/102 ppm
0820 Mob Van
E. Roelofs & D. Balmer arrive on site well MW-303-38
0825 Conduct Physical & Hazzard Survey
ER 8/29/13
~~082~~

PID 0.0 ppm Breathing Zone 9.6 ppm wellhead
DTW 25.4
0900 Insert tubing to intake at 27.975'
0905 Begin Purging
ER 8/29/13 ~~Stab~~ Parastaltic pump low on charge
note: switched pumps for TEAM I's pump.
0946 Stable Parameters
pH 5.53 SC 0.096 mS/cm Turb 0.0 NTU DO 1.28 mg/L
Temp 8.18 °C Sal 0.00 % ORP 72 mV

Elli Roelofs 8/29/13

August 29, 2013 Adak LTM 2013

1000 Start Sampling MW-303-38-2013
(3) GRO (AK101)
(3) BTEX (8260C)
(2) Dibenz (a,h) anthracene
(1) Total Lead (EPA 6020A)
(1) Dissolved Lead (EPA 6020A)
(1) alkalinity (2320B) Sulfate (300.0)
(3) methane (RSK 175)
Total = 14 bottles
Package Bottles
1040 Test Kits D.O 1.5 ppm Fe^{2+} 2.0 ppm
CO_2 20 ppm
1055 DTB 30.55' TC
Note: Used water level indicator tied to plastic tubing to get tubing position in the well MW-303-38.
1100 Dispose of purge water on ground
1110 Return to APARTMENTS
1120 Chain of Custody
Put Samples in coolers for shipping
1300 ~~Break for~~ ER 8/29/13 Take ~~Coolr~~ ER 8/29/13 coolers to Alaska Air lines
* late entry
1200 Horriba Calibration Check
1430 Prepare Bottles for tommorrow
1445 Catch up on Paper work / field Notes
1645 End of Day Elle Rollins 8/29/13

August 30, 2013 Adak LTM 2013

0700 Morning Meeting
QC Report
0724 Health & Safety Meeting
PPE: Safety glasses, nitriles, Safety vest, Steel toed boots
0725 Earthquake ~~5.6 (?)~~ ER
7.0 south of Atka
0824 Horriba Calibration Check

Time	pH	Sc mS/cm	Turb NTU	DO mg/L	TEMP °C	Sal %	ORP
0824	8.71	3.75	0.0	9.33	14.37	0.20	253
~~1550~~ 1350 ER 8/30	3.70	3.70	~~3.70~~ 0.0 ER 8/30	8.16	15.73	0.19	278
1716	3.74	3.59	0.0	8.03	16.89	0.19	275

PID Calibration 0.0 ppm / 100 ppm
0843 Mob van
0845 Return to apartment for road map
0855 D. Balmer & E. Roelofs arrive on site
South of Runway 18-36
well 02-231
0858 Photo SW
0900 DTW 14.32' TC
Conduct Physical & Hazzard Survey
0910 Insert tubing at intake 16.44'
0912 Begin Purging
0936 Stable Parameters
pH 6.75 Cond. 0.371 mS/cm Turb 0.0 NTU
Temp 8.39 °C Sal 0.02 % Redox -115 mv
Elle Rollins 8/30/13

August 30, 2013 Adak LTM 2013

0940 Collect Samples 02-231-2013
(3) BTEX (8260C)
(2) DRO (AK102)
(2) PAHs (17) (8270SIM)

0950 Collect Duplicate 02-241-2013
(3) BTEX (8260C)
(2) PAHs (17) (8270SIM)
Package Samples

1030 DTB 18.60' TC

1032 ~~Move to~~ GR 8/30/13 Dispose of purge water on ground

1033 Move to well AS-1 Photo
Conduct Physical and Hazzard Survey
PID 0.0/0.0 Both
DTW 13.66 TC' 27' (26.925')

1115* Insert tubing at intake ~~21.455~~

* Realized at 1100 that intake was calculated wrong. Corrected and redid water Sampling Log

1117 Begin Purging

~~1130~~ GR 8/30/13 Stable Parameters

1128 pH 6.22 cond 0.499 mS/cm Turb 0.0 NTU
DO 0.00 Temp 8.81°C Sal 0.02 ORP -123 mV

1135 Conduct Sampling AS-1-2013
(3) BTEX (8260C)
(6) PAHs (17) (8270D SIM) w/MS/MSD
Package Bottles

8/30/13

August 30, 2013 Adak LTM 2013

1220 DTB 28.80' TC soft bottom
Dispose of purge water on ground

1225 Back to apartments

~~1550~~ GR 8/30/13 1350 Horriba Cal Check

1355 Mob van

1357 E. Roelofs D. Balmer Arrive to well 02-232

1400 Photo South
Conduct Hazzard & Physical Survey
PID 29.0 well head space 0.0 breathing zone
DTW 16.55'

1420 Insert tubing at intake 20.65'

1422 Start Purging

1438 Stable Parameters
pH 6.12 cond 0.422 mS/cm Turb 0.0 NTU
DO 0.00 temp 8.98 Sal 0.02% ORP -116 mV

1445 Conduct Sampling 02-232-2013
(9) BTEX (8260C) w/MS/MSD
(2) PAHs (17) (8270D SIM)
Package Bottles
DTB 29.71
Dispose of purge water on ground

1528 Move to RW-18/36-03 Photo 5
Conduct Physical & hazzard Survey

1530 PID 0.0 both Photo 5
DTW 13.59' DTB 26.10'

8/30/13

August 30, 2013 Adak LTM 2013

1539 well E-216

Conduct hazzard and physical survey

PID 3.7 wellhead 0.0 breathing zone

Photo SE

~~DTW~~ EK 8/30/13 DTP 15.98' DTW 16.12'

DTB 22.35'

1554 well RW-18/36-04

Conduct hazzard and physical survey

PID 32.9 ppm wellhead

Photo Top view

DTW 14.20 TC DTB 27.20' TC

DTP 14.06' TC

1620 well E-217

Conduct hazzard & physical survey

PID 7.4 ppm wellhead 0.0 ppm breathing zone

Photo NE

DTW 15.63 DTB 22.05

DTP 15.59

1633 well 18/36-02

Conduct hazzard & physical survey

Photo S

DTW 17.50' DTB 24.05'

PID 3.7 ppm wellhead 0.3 ppm breathing zone

Elle Rowlofs 8/30/13

August 30, 2013 Adak LTM 2013

1658 Photo Z4-2 E

Photo E-213 W

1700 Well Z4-2

Conduct hazzard and physical survey

PID 0.0 both

DTW 12.17' TC DTB 14.50' TC

1705 Well E-213

Conduct hazzard & physical survey

PID 6.4 ppm wellhead Breathing zone 0.0 ppm

DTP 16.90' TC DTW 10.91' TC DTB 18.10' TC

1710 Back to apartments

1716 Calibrate Horriba Check

1730 Photo Log by Elle Roelofs

0858 02-231 SW

1032 AS-1

1400 02-232 S

1529 RW-18/36-03 S

1539 E-216 SE

1554 RW-18/36-04 Topview

1620 E-217 NE

1633 18/36-02 S

1634 Don at 18/36-02

1656 Z4-2 East

1656 E-213 West

1740 Arrange Bottles & organize Van

End of Day

Elle Rowlofs 8/30/13

August 31, ~~200~~ 2013 ER 8/31/13 Adak LTM 2013

0700 Morning Meeting
QC Report
Health & Safety PPE: Safety glasses, safety vest, steel toed boots, nitriles

0805 Horriba Calibration Check

Time	pH	SC mS/cm	Turb NTU	DO mg/L	Temp °C	Sal %	ORP
0805	3.72	3.65	0.0	8.54	15.59	0.19	264
1347	3.74	3.55	0.0	7.92	15.15	0.19	265
	ER 8/31/13						

PID Cal 0.0/100 ppm

0815 MOB Van
0825 Discard used tubing at Bunker
0840 E. Roelofs & D. Balmer arrive on site Artic Acres well 03-416
0848 well 03-416
Photo topview
Conduct physical & hazzard survey
No hazzards detected
DTW 19.92'
0900 Insert tubing at intake 25.05'
0901 Begin Purging
0932 Stable Parameters
pH 5.89 Cond 0.191 mS/cm Turb 0.3 NTU
DO 0.00 mg/L Temp 7.82 °C Sal 0.01%
ORP -77 mv

[signature] 8/31/13

August 31, 2013 Adak LTM 2013

0940 Conduct Sampling 03-416-2013
(2) DRO (AK 102)
Package Bottles
DTB 30.17' TC
1005 Move to well 03-890
Photo taken by Team 1 on 8-30-13
Conduct Physical & Safety Hazzard Survey
No hazzards detected
DTW 23.90'
1015 Insert tubing at intake 27.7' TC
1020 Begin Purging
1042 Stable Parameters
pH 5.77 Cond. 0.361 mS/cm Turb 50.1 NTU
DO 0.00 Temp 8.80 Sal 0.02
ORP -89 mv
1050 Conduct Sampling 03-890-2013
(2) DRO (AK102)
Package Bottles
DTB 31.69' TC
1105 Move to well 03-421
Photo Taken by Team 1 on 8-30-13
Conduct Hazzard & Physical Survey
No Hazzard detected
DTW 23.06' TC
1115 Insert tubing at intake 25.58' TC

[signature] 8/31/13

August 31, 2013 Adak LTM 2013

1121 Begin Purging
1148 Stable Parameters
~~Collect 5a~~ ER 8/31/13
pH 5.85 cond. 0.299 mS/cm Turb 0.0 NTU
DO 0.00 Temp 8.53 Sal 0.01%
ORP -60 mv
1150 Collect Sample 03-421-2013
(2) DRO (AK 102)
~~2~~ ER 8/31/13 Collect Sample 03-431-2013
1200 (2) DRO (AK 102)
Package Bottles
DTB 28.14'
1215 Return to apartments
1347 Calibrate Horriba Check
1352 Mob van
1400 E. Roelofs / D. Balmer arrive on site
1403 well 02-453
Conduct hazard & physical survey
No immediate hazard, Scrap metal around building could be hazardous in higher winds.
PID 10.3 ppm wellhead 0.0 ppm breath
DTW 9.14' TC DTB 15.10'
Photo S

Ellen Fullerton 8/31/13

August 31, 2013 Adak LTM 2013

1425 Well 02-497
Photo top view
Conduct Physical Hazzard Survey
Scrap metal arround building
PID 187 ppm wellhead 0.0 ppm breathing zone
DTW 6.69' DTB 10.70'
1430 Well NMCB-08
Photo top view
Conduct Physical Hazzard Survey
Scrap metal & broken glass near building
PID 386 ppm wellhead 0.0 ppm breathing zone
DTW 5.98' TC
1453 Well NMCB-10 photo S
Conduct Physical Hazzard Survey
Partially open manhole nearby
PID 301 ppm wellhead 0.1 ppm breathing zone
DTW 10.56' DTP 10.42' DTB 17.00' TC
1508 Well 02-463 Photo W
Conduct Physical Hazzard Survey
Scrap metal nearby
PID 2.1 ppm wellhead 0.0 ppm breathing zone
DTW 9.71 TC DTB 15.20' TC
1529 Well 02-455 Photo S
Conduct Physical Hazzard Survey
No hazards

Ellen Fullerton 8/31/13

August 31, 2013 Adak LTM 2013

PID 0.0 Both

DTW 11.53' TC DTB 17.85' TC

1541 well 02-819 Photo Top view

Conduct Physical Hazard survey

No hazards detected

PID 245 ppm wellhead 0.0 ppm breathing zone

DTW 7.33' TC DTB 14.55' TC

1555 Return to apartments

Photo Log by Elle Roelofs

1403 02-453 S

1425 02-497 topview

1430 NMCB-08 topview

1453 NMCB-10 S

1508 02-463 W

1529 02-455 S

1541 02-819 topview

1630 Paperwork in office

1800 End of day meeting

1830 End of day

8/31/13

September 1, 2013 Adak LTM 2013

1100 Pack coolers for flight

1250 Bring Coolers to airport

End of day

9-1-2013

September 2, 2013 Adak LTM 2013

0700 Morning Meeting
QC Report
Health & Safety
PPE: Safety glasses, vests, nitrile, Steeltoed boots

0810 HORRIBA CAL CHECK

Time	PH	SC mS/cm	Turb NTU	DO mg/L	Temp	Sal%	ORP
0810	3.72	3.66	0.0	8.06	13.46	0.19	257
1021	3.71	3.98	0.0	8.44	11.80	0.18	266

PID 0.0/100 ppm

0822 Mob Van
0828 Arrive at well 02-479
Conduct Physical Hazard survey
No Hazards observed
~~PID~~ ER
DTW 9.13'
0840 Insert intake at 14.785'
0900 Begin Purging
0956 Stable Parameters

Time 0956 pH 6.29 cond. 0.241 mS/cm Turb 4.8 NTU
DO 6.93 Temp 9.64 Sal 0.01% ORP 177 mV
1000 Collect Sample 02-479-2013
(3) GRO (AK101)
Package Bottles
DTB 19.57'

9/02/13

September 2, 2013 Adak LTM 2013

1021 Horriba Cal Check
1015 Return to Apartments
1030 Paperwork in office
1100 End of Day

9/02/13

September 3, 2013 Adak LTM 2013

0700 Morning Meeting
QC Report
Health & Safety
PPE: safety glasses, safety vests, nitriles, steel toed boots.

0744 Horriba Cal Check

Time	pH	cond	Turb	DO	Temp	S al %	ORP
0744	3.70	3.58	0.0	8.50	12.28	0.19	260
1322	3.77	3.46	0.0	8.20	11.78	0.18	268
1635	3.76	3.44	0.0	7.76	12.56	0.18	263

PID 0.0/101 ppm

0755 MOB VAN

0800 E. Roelofs D. Balmer Arrive on site
well NMCB-09
DTW 9.10'
Conduct Physical Hazard Survey
Hazards: sheet metal scraps

0820 Insert tubing at intake

0821 Begin Purging

0838 Stable Parameters
pH 6.29 cond. 0.347 ms/cm Turb 0.0
DO 0.00 Temp 8.05 Sal 0.02% ORP -134 mv

0845 Collect Sample NMCB-09-2013
(3) GRO (AK 101)
Package Bottles
DTB 18.60'

Elle Parker 9/03/13

September 3, 2013 Adak LTM 2013

0900 Move to well 02-461
Conduct Physical Hazard Survey
No hazards
DTW 6.41'

0916 Insert tubing at ~~6.17.2'~~ EP 9/05/13 10.2'

0918 Begin Purging

0938 Stable Parameters
pH 5.93 cond 1.48 Turb 2.5
DO 0.00 Temp 7.73 Sal 0.07 ORP -72

0940 Collect Sample 02-461-2013
(3) Gro (AK101)
Package Bottles
DTB 14.33'

0952 move to well 02-818
Conduct Physical Hazard Survey
No hazards
DTW 8.55'
Insert 12.6'
tubing at intake

1018 Begin Purging

1034 Stable Parameters
pH 6.32 cond 0.245 ms/cm Turb 0.7 NTU
DO 0.00 mg/L Temp 8.74°C Sal 0.01% ORP -102 mv

1040 Collect Sample 02-818-2013
Package Bottle DTB 16.62'

Elle Parker 9/03/13

September 3, 2013 Adak LTM 2013

1045 move to well 02-451
Conduct physical hazard survey
No hazards
DTW 8.30'
1100 Insert tubing at intake 14.9'
Begin Purging
1130 Stable Parameters
pH 6.28 cond. 0.901 mS/cm Turb 0.0 NTU
DO 2.72 mg/L Temp 8.86°C Sal 0.04% ORP 107mv
1132 Collect Sample 02-451-2013
(9) GRO (AK101) w/ MS/MSD
Package Bottles
DTB 21.15'
1200 Return to apartments
1322 Horriba Cal Check
1330 Mob VAN
1335 Arrive at well 04-601 Tanker Shed
1337 Photo SW
Conduct Physical Hazzard Survey
No hazard
PID 0.0/both
DTW 10.35'
1345 Insert tubing at intake 14.09'
1347 Begin Purging
[signature] 9/03/13

September 3, 2013 Adak LTM 2013

1428 Stable parameters
pH 5.80 cond. 0.130 Turb 0.0
DO 3.78 Temp 9.50 Sal 0.01% ORP 80mv
1430 Collect Sample 04-601-2013
(6) DRO (AK102) w/ MS/MSD
Package Bottles
DTB 17.65'
Move to well 04-290 ~~Photo~~ ER 9/3/2013
Conduct Physical Hazard Survey
No hazard
PID 0.0 ppm Both
DTW 7.22'
1525 Insert tubing at intake 10.86'
1530 Begin Purging
1558 Stable Parameters
pH 5.90 cond. 0.231 mS/cm Turb 0.0 NTU
DO 0.00 Temp 9.23°C Sal 0.0% ORP -28
1600 Collect Sample 04-290-2013
(2) DRO (AK102)
Collect Sample 04-300-2013 Duplicate
1610 (2) DRO (AK102)
Package Bottles
1627 Photo Topview
1627 Back to Apartments
1635 Cal Horriba Check End of Day
[signature] 9/03/13

September 4, 2013 Adak LTM 2013

0700 Morning Meeting
QC Report
Healthy & Safety PPE: vest, steel toed boots, safety glasses, nitrile

0757 Horriba Calibration Check
pH 3.70 cond 3.48 Turb 0.0
DO 7.30 Temp 13.31 Sal 0.18% ORP 268
PID 0.0/101ppm

0825 MOB VAN

0830 E. Roelofs & D. Balmer arrive at well 04-159

0831 Photo W
Conduct Physical Hazard Survey
No Hazards
PID 0.0 Both
DTW 23.55'

0840 E. Roelofs & D. Balmer report to palisades landfil for rouge wave watch per request by team 1

0900 E. Roelofs & D. Balmer Report to Beach for rouge wave watch.

1050 Return to well 04-159
Insert intake at 28.5'

1100 Begin Purging

9/4/13

September 4, 2013 Adak LTM 2013

1126 Stable parameters
pH 6.18 cond 0.348 mS/cm Turb 0.0 NTU
DO 0.0 mg/L Temp 7.45 Sal 0.02%
ORP -86 mv

1130 Collect Sample ~~04-159-2013~~ SK 9/4/13 04-159-2013
(2) DRO (AK102)
Package Bottles

1145 Move to well 04-164

1147 Photo S
Conduct Physical Hazard Survey
No Hazards
PID 23.1ppm wellhead 0.0ppm breathing zone
DTW 22.22' TC DTB 32.20' TC

1200 Back to Apartments

1300 Horriba Calibration Check
pH 3.73 ORP 263mv cond 3.44 mS/cm
Turb 0.0 NTU DO 7.17 mg/L Sal 0.18%

1325 Arrive at well SP4-3

1330 Photo E
Conduct Physical Hazard Survey
No hazards
PID 0.0 both
DTW 20.4'

1340 Arrive at well 04-158

1341 Photo well 04-158 topview

9/4/13

September 4, 2013 Adak LTM 2013

1341 Photo well 04-173 top view
Photo well 04-155 top view
1342 Photo well ~~04-154~~ 04-157 South ER 9/4/13
1348 Conduct Physical hazard survey at well 04-158
No hazards
PID 10.5ppm headspace 0.0ppm breathing zone
DTW 19.71
1400 move to well 04-173
Conduct Physical Hazard survey
No hazards
~~PID 18.0ppm wellhead 0.0ppm headspace~~ ER 9/4/13
~~DTW 19.51' DTP 19.50' DTB 21.2'~~ ER 9/4/13
PID 6.7ppm wellhead 0.1ppm breathing zone
DTW 14.78'
1420 move to well 04-157
Conduct physical hazard survey
No hazards
PID 18.0ppm wellhead 0.0ppm breathing zone
DTP 19.50' DTW 19.51'
1405 move to well 04-155
Conduct physical hazard survey
No hazards
PID 33.6ppm wellhead 0.1ppm breathing zone
DTP 15.80'TC DTW 16.01'TC DTB 20.30'TC
1450 Return to well 04-158 To Sample
Elle Ruelofs 9/4/13

September 4, 2013 Adak LTM 2013

1453 Insert tubing at intake 23.89'TC
1455 Start Purging
1516 Stable parameters
pH 5.65 cond. 0.291 mS/cm Turb 21.0NTU
DO 0.00mg/L Temp 7.49°C Sal 0.01%
ORP -25mv
1520 Collect Sample 04-158-2013
(2) DRO (AK102)
Package Bottles
DTB 25.1'TC
1545 Return to apartment
Horriba Calibration Check
Temp ~~12.89~~ ER 9/4/13 13.64°C pH 3.74 ORP 221mv Sal 0.13%
cond. 3.39 mS/cm Turb 0.0NTU DO 6.40mg/L
Photo Log by Elle Ruelofs
9-3-2013
1337 well 04-601 SW
1627 well 04-290 Top view
9-4-2013
~~1342 well 04-159~~
0831 well 04-159 W
1147 well 04-164 S
1342 04-157 South
1329 well SP4-3 E, 1330 E
1341 well 04-158 Top view
1341 well 04-173 top view
1341 well 04-155 top view
~~1342 well~~ ER 9/4/13
Elle Ruelofs 9/4/13

September 5, 2013 Adak LTM 2013

0700 Morning Meeting
QC Report
Health & Safety Meeting
PPE: Nitriles, Safety glasses, Steel toed boots, Safety vest

0755 Horriba Cal Check

Time	pH	ORP mv	Cond mS/cm	Turb NTU	DO mg/L	Sal %	Temp
0755	3.70	247	3.42	0.0	7.46	0.18	N/A
1340	3.73	250	3.34	0.0	6.44	0.17	12.97
1810	3.79	236	3.29	4.3	5.75	0.17	12.57

0815 E. Roelofs & D. Balmer arrive at SA80
0820 well 04-173 DTW 14.78' TC
0830 Insert tubing at intake 20.63'
0836 Begin Purging
0852 Stable Parameters
pH 5.84 cond. 0.233 mS/cm Turb 0.0 NTU
DO 0.0 mg/L Temp 6.29°C Sal 0.01% ORP -76 mv
0855 Collect Sample 04-173-2013
(2) DRO (AK102)
Package Bottles
DTB ~~2.6~~ EJR 9/5/13 26.6' TC
0915 Back to apartments to retrieve radio
{0910} Containerize purge water
1000 E. Roelofs & D. Balmer back on site
SA80 Steam Plant
Ell Roelofs 9/5/13

September 5, 2013 Adak LTM 2013

1005 well SP4-3 DTW 20.37' TC
1010 Insert intake at 24.2'
1015 Begin Purging
1042 Stable parameters
pH 6.06 cond. 0.277 mS/cm Turb 0.0 NTU
DO 0.00 mg/L Temp 7.21°C Sal 0.01%
ORP -73 mv
1050 Collect Sample SP4-3-2013
(2) DRO AK102
Package Bottles
DTB 28.00'
1105 Back to apartments
Package Bottles for shipping
1300 Samples to Alaska Airlines
1340 Horriba Cal Check
1400 E. Roelofs & D. Balmer arrive to well 04-701
Conduct Physical Hazard Survey
No hazards
DTW 14.20'
1413 Insert tubing at intake 17.9'
1415 Begin Purging
1440 Stable Parameters
pH 5.81 cond. 0.115 mS/cm Turb 0.0 NTU DO 0.00
Temp 9.07°C Sal 0.01% ORP 46 mv
Ell Roelofs 9/5/13

September 5, 2013 Adak LTM 2013

1442 Collect Sample 04-701-2013
(3) GRO (AK101)
Package Samples
DTB 21.60' (8/30/13)

1450 Move to well 04-213 ~~2013~~ SR 9/5/13
Conduct Physical Hazard Survey
Metal on Satelite nearby would be hazardous in high wind.
DTW 24.00'

1510 Insert tubing at intake 27.00'
Begin Purging

1534 Stable Parameters
pH 5.90 cond 0.152 mS/cm Turb 0.0 NTU
DO 0.00 Temp 7.55°C Sal 0.01%
Redox -53 mv

1535 Collect Sample 04-213-2013
(3) GRO (AK101)
Package Bottles
DTB 29.95' (8/30/13 Team 3)

1555 Move to well 04-210
Conduct Physical Hazard Survey
No Hazards
DTW 24.88'

1605 Insert tubing at intake 29'

1610 Start Purging

[illegible] 9/5/13

September 5, 2013 Adak LTM 2013

1624 Stable parameters
pH 5.93 cond. 0.180 mS/cm Turb 0.0 NTU
DO 0.00 mg/L Temp 7.09°C Sal 0.01% ORP -45 mv

1625 Collect Sample 04-210-2013
(3) GRO (AK101)
Package Bottles
DTB 33.05 (8/30/13 Team 3)

1640 Move to well 04-202
Conduct Physical Hazard Survey
Metal on Satelite nearby would be hazardous in high wind
DTW 26.22'

1650 Insert tubing at intake 29.8'

1658 Start Purging

1748 Stable Parameters
pH 6.09 cond. 0.145 mS/cm Turb 2.4 NTU
DO 0.00 Temp 7.02°C Sal 0.01%
ORP -69

1750 Collect Sample 04-202-2013
(3) GRO (AK101)
Package Bottles
DTB 33.42 (8/30/13 Team 3)
Containerize purge water for disposal

1800 Back to apartments

1810 Horriba Cal Check End of Day

[illegible] 9/5/13

September 6, 2013 Adak LTM 2013

0700 Morning Meeting
QC Report
Health & Safety
PPE: Nitriles, vests, steeltoed boots
safety glasses

0830 Horriba Cal Check

Time	pH	ORPmv	cond mS/cm	turb NTU	DO mg/L	Sal %	Temp °C
0830	3.73	242	3.35	0.0	6.65	0.17	11.97
1500	3.76	260	3.20	0.0	6.09	0.17	12.11
1750	3.75	254	3.21	0.0	5.65	0.17	12.03

PID 0.0 / 104 ppm

0845 Mob Van

0855 E. Roelofs & Don Balmer arrive at SA80 well SP4-3 to re-sample because of overlooked unstable pH in first attempt to sample.

0900 Barb S. & John H. arrive on site to compare readings of well depths due to discrepancies from 2012 to 2013.

0910 Insert intake at 24.2' DTW 20.37' TC
Start Purging

0942 Stable Parameters
pH 5.89 ORP -52mv cond 0.285 mS/cm Turb 0.0
DO 0.00 mg/L sal 0.01 Temp 5.96°C

[signature] 9/6/13

September 6, 2013 Adak LTM 2013

0945 Collect Sample SP4-3-2013
(2) DRO (AK102)
Package Bottles
DTB 28.00' (9/5/13)

1010 Back to apartments / office

1110 Mob van for SWMU 61

1115 E. Roelofs & D. Balmer arrive on site SWMU 61 and load equipment to walk to well TFB-MW-4B

1140 Arrive at well TFB-MW-4B

1141 Photo E
Conduct Physical Hazard Survey
Hazard - bright yellow metal vent
PID 0.0 Both DTW ~~20.37'~~ TOC 9/6/13 4.47' TC
Insert tubing at intake 22.5' TC

1155 Start Purging

1214 Stable Parameters
pH 6.05 ORP -38mv Cond 0.272 mS/cm Turb 0.0 NTU
DO 0.00 mg/L Sal 0.01% Temp 7.22

1220 Collect Sample TFB-MW-4B-2013
(3) GRO AK101
(3) BTEX (8260C)
Return to vehicle to package samples
DTB 29.70'

1250 Back to van

[signature] 9/6/13

September 6, 2013 Adak LTM 2013

1500 Horriba Cal Check

1530 E. Roelofs & D. Balmer arrive to GCI compound well 04-204

Conduct Physical Hazard Survey

Scrap metal on satelite hazard in high winds.

PID 398 ppm wellhead 0.3 ppm breathing zone

Insert tubing at intake 29.475'

1535 Start Purging

1552 Stable Parameters

pH 5.82 cond. 0.239 mS/cm Turb 0.0 NTU DO 0.00 mg/L

Temp 7.55°C Sal 0.01% ORP -18 mv

1605 Collect Sample 04-204-2013

(3) GRO (AK101)

Package Bottles

DTW 26.02' DTB 33.05' (8-30-13 Team 3)

1630 Back to appartments/office

Photo Log by Elle Roelofs

1140 East view from SWMU 61

1141 East view of well TFB-MW-4B

1645 Paper work in office

1750 Horriba Cal Check

1830 End of Day

Elle Roelofs 9/6/13

September 7, 2013 Adak LTM 2013

0700 Morning Meeting

QC Report

Health & Safety

PPE: Nitriles, Safety Vests, Steal toed boots, Safety glasses

Calibrate PID 0.0/101 ppm

0848 E. Roelofs & D. Balmer arrive at SWMU 62

0849 Photo W well RW-303-13

~~0848~~ 0850 Photo SW well AMW-704

EE 9/7/13

Well RW-303-13

Conduct physical hazard survey

Hazard: electrical box casing, see photo

PID 0.0 ppm both

DTW/DTP 6.44' Trace < 0.01'

DTB 19.45'

0900 well AMW-704

Conduct Physical Hazard Survey

No hazards

PID 0.0 ppm both

DTW 6.51' btoc DTB 16.60 btoc

0917 well 03-898 Photo W

Conduct Physical Hazard Survey

No hazards

PID 0.0 ppm both

DTW 12.46' DTB 21.60'

Elle Roelofs 9/7/13

September 7, 2013 Adak LTM 2013

0926 well RW-303-16 Photo W

Conduct physical hazard survey

No hazards

PID 42.2 ppm wellhead 0.0 ppm breathing zone

DTW 7.79' btoc DTB 17.50' btoc

0939 well RW-303-14 Photo S

0939 Conduct physical hazard survey

No Physical hazards present

PID 0.0 ppm both

DTW 7.73' btoc DTB 19.50' btoc

0953 well CTO-124-MW15 Photo S

Conduct physical hazard survey

No hazards

PID 65.0 ppm wellhead 0.0 ppm breathing zone

DTW 17.60' btoc DTB 20.15' btoc

1004 Photo Well 03-101 ~~SW~~ SR 9/7/13 S

1005 Photo topview well 03-502

1007 photo SW well HMW-303-11

1010 well 03-101

No hazards nearby

PID 37.0 ppm wellhead 0.0 ppm breathing zone

DTW 22.43' btoc DTB 26.92' btoc

1015 well 03-502

Conduct Physical Hazard Survey — No hazards

PID 0.0 ppm both DTW 24.40' btoc DTB 26.30' btoc

[illegible] 9/7/13

September 7, 2013 Adak LTM 2013

1020 well HMW-303-11

Conduct physical hazard survey

No hazards

PID 0.0 ppm both

DTW 26.60' BTOC DTB 32.30' BTOC

1042 well 03-103 Photo SW

Conduct physical hazard survey

No hazards

PID 0.2 ppm wellhead 0.0 ppm breathing zone

1046 DTW 15.78' DTB 22.33'

~~1048~~ SR 9/7/13 well 03-102 photo SW

Conduct physical hazard survey

No hazards

PID 6.9 ppm wellhead 0.0 ppm breathing zone

DTW 13.99' BTOC DTB 21.30' BTOC

1053 well RW-303-15 Photo E

Conduct physical hazard survey

No hazards

PID 3.1 ppm wellhead 0.0 ppm breathing zone

DTW 27.55' btoc DTB 34.05' btoc

1102 well HMW-303-9 Photo S

Conduct physical hazard survey

No Physical Hazards detected

PID 103 ppm Wellhead 0.0 ppm breathing zone

DTW 26.17' btoc DTB 28.65' btoc

[illegible] 9/7/13

September 7, 2013 Adak LTM 2013

1111 well HMW-303-3 Photo N
Conduct Physical Hazard Survey
No hazards
PID 23.5 ppm wellhead 0.0 ppm breathing zone
DTW 27.82' btoc DTB 33.40' btoc

1121 well 03-109 Photo W
Conduct physical hazard survey
No hazards
PID 0.0 ppm both
DTW 30.03' btoc DTB 36.80' btoc

1133 well MW-303-8 Photo topview
Conduct physical Hazard survey
No hazard
PID 1.7 ppm wellhead 0.0 ppm breathing zone
DTW 23.00' DTP 22.12' DTB 29.25' btoc

1141 MW-303-12 photo topview
Conduct physical hazard survey
No hazard
PID 9.4 ppm wellhead 0.0 ppm breathing zone
DTW 21.54' DTB 31.88' btoc

1148 RW-303-4 Photo topview
Conduct physical hazard Survey
No hazard
PID 14.0 ppm ~~breathing zone~~ well head 0.0 ppm breathing zone
LR 9/7/13
DTW 22.28' DTB ≈ 35.8'

[signature] 9/7/13

September 7, 2013 Adak LTM 2013

1157 well MW-303-7 photo topview
Conduct physical hazard survey
No hazards DTW - 21.80' btoc DTB 33.50'
PID 4.2 ppm wellhead 0.0 ppm breathing zone

1200 Back to apartments

1500 Paperwork in office
END of Day

[signature] 9/7/13

September 8, 2013 Adak LTM 2013

1100 Paper work in office

Package Samples for shipment

1400 Samples to Alaska Airlines

End of day

9/8/13

September 9, 2013 Adak LTM 2013

0700 Morning Meeting

QC Report

Health & Safety

PPE: steel toed boots, safety glasses, safety vests, nitriles

0812 Horriba Cal Check

Time	pH	ORP	cond	turb	DO	Sal	Temp
0812	3.75	252	3.31	0.0	6.55	0.17	11.98
1320	3.75	257	3.23	0.0	6.64	0.17	11.47
1755	3.77	255	3.17	0.0	5.53	0.17	14.96

PID cal check 0.0/104 ppm

0830 Mob van

0840 E. Roelofs & D. Balmer arrive on site

SWMU 62 Eagle Bay.

0850 well RW-303-13 ~~2013~~ ER 9/9/13

Conduct physical hazard survey

Hazard: electrical box case next to well

DTW 6.44' PID 0.0 both (9/7/13)

0853 Insert tubing at intake

0854 Start purging

0932 Stable parameters

pH 5.64 ORP 108mv cond 0.113 mS/cm turb 0.0 NTU

DO 2.68 mg/L Sal 0.01% Temp 9.30°C

0935 Collect Sample RW-303-13-20VB

(6) DRO (AK102) w/ MS/MSD

9/9/13

September 9, 2013 Adak LTM 2013

0940 Package Bottles
DTB 19.45 (9/7/13)
1000 Return to office for
GRO Trip Blank.
1040 E. Roelofs & D. Balmer return to
well AMW-704
Conduct physical hazard survey
No hazards
DTW 6.51' PID 0.0 both (9/7/13)
1056 Insert tubing at intake 11.8'
Start Purging
Stable Parameters
pH 5.53 ORP 87mv Cond. 0.136 mS/cm Turb 0.0074
DO 0.60 mg/L Sal 0.01% Temp 8.54°C
1125 Collect Sample AMW-704-2013
(5) GRO (AK101)
(2) DRO (AK102)
Package Samples
DTB 16.60' TC (9/7/13)
1145 Back to office
1425 E. Roelofs & D. Balmer back on
site SWMU 62 Eagle Bay.
well RW-303-16
ER 9-9-13 (9-7-13)
DTW 7.79' TC PID 40.2 ppm wellhead 0.0 ppm breathing zone

Ellen Roelofs 9/9/13

September 9, 2013 Adak LTM 2013

1440 Insert tubing at intake 12.645' TC
Begin Purging
1458 Stable Parameters
pH 5.85 ORP -39mv Condo. 222 mS/cm Turb 0.0 NTU
DO 0.00 mg/L Sal 0.01% Temp 8.57°C
1500 Collect Sample RW-303-16-2013
(2) DRO (AK 102)
Package Samples
DTB 17.50' TC (9/7/13)
1530 Move to well 03-502
Conduct physical hazard survey
No hazards
DTW 24.40 PID 0.0 both (9/7/13)
Insert tubing at intake 25.4'
1543 Start purging
Stable parameters / 3 casing volumes
pH 5.90 Cond 0.151 mS/cm Turb 2.2 NTU
DO 0.0 mg/L Temp 10.99°C Sal 0.01% ORP -7mv
Did not stabilize but removed 3 casing volumes
1600 Collect Samples 03-502-2013
(4) GRO (AK101)
Package Samples
DTB 26.30' TC (9/7/13)
1620 move to well MW-303-7 ~~2013~~ ER 9/9/13

Ellen Roelofs 9/9/13

September 9, 2013 Adak LTM 2013

1620 well MW-303-7
Conduct physical hazard survey
No hazards
DTW 21.80' PID 4.2ppm well head 0.0ppm breathing zone
Insert intake 26.65' TC
1638 Start purging
1648 Stable parameters
pH 5.80 cond 0.301 ms/cm Turb 1.5 NTU
DO 0.00 mg/L Temp 8.60°C Sal 0.01%
ORP -54 mv
1700 Collect Sample MW-303-7-2013
(2) DRO (AK102)
Package Samples
DTB 33.50' (9/7/13)
Move to well MW-303-8
1710 D. Balmer remeasured DTW & DTP
with two different pieces of equipment
piezometer DTP 22.92' DTW 23.02'
red meter DTP 22.92' DTW 23.01'
1715 Back to office
1800 End of day
1725 Cal horiba check

9/9/13

September 10, 2013 Adak LTM 2013

0700 Morning Meeting
QC Report
Health & Safety
PPE: nitriles, steel toed boots, safety glasses, safety vests
0800 PID cal check 0.0/103 ppm
0825 Mob van
0830 E. Roelofs & D Balmer arrive on site
SWMU 62 Sandy cove
0833 well MRP-MW2
DTW 21.68'
* well inspection was completed with Area 303 wells
0844 well RW-102-4
Conduct physical hazard survey
No hazards
PID 4.3ppm wellhead 0.0ppm breathing zone
DTW 19.51' TC
0901 well HMW-146-1 photo top view
Conduct physical hazard survey
No hazards
PID 0.1 ppm wellhead 0.0 ppm breathing zone
DTW 17.04' TC DTB 21.85' TC

9/10/13

September 10, 2013 Adak LTM 2013

0923 well MW-134-10 photo
Conduct physical hazard survey
hazard fencing down near well
PID 30.5 ppm wellhead 0.0 ppm breathing zone ~~well~~ ZR 9/10/13
DTW 17.18' DTB 22.04'
0940 Back to apartments
0945 D. Balmer on site at Roberts Landfill well A-3 to provide advice.
1015 Horriba Cal Check

Time	pH	ORP	Cond	Temp	Turb	DO	%
1015	3.74	270	3.23	12.83	0.0	5.69	0.17
1345	3.76	254	3.20	12.06	0.0	5.42	0.17
1725	3.73	239	3.19	11.86	0.0	5.19	0.17

1100 Mob van
E. Roelofs & D. Balmer arrive on SWMU 62
1107 well MRP-MW3 photo SE
Conduct physical hazard survey
No Hazards
PID 1720 ppm wellhead 0.0 ppm breathing zone
DTW 8.29' DTB 10.70'
1220 Back to apartments
1345 Horriba Cal Check
1359 E. Roelofs & D. Balmer on site
SWMU 62 Sandy Cove
Ellen Roelofs 9/10/13

September 10, 2013 Adak LTM 2013

1359 well MW-146-1
Conduct physical hazard survey
No hazards
PID 17.6 ppm wellhead 0.0 ppm breathing zone
DTW 17.52
1415 Insert tubing at intake 18.55' TC
Start Purging ZR 9/10/13
~~Stable~~ Parameters 3 casing volumes
pH 5.61 ORP -1 mv cond 0.272 Temp 8.11°C
Turb 0.0 NTU DO 0.00 mg/L Sal 0.01%
1440 Collect Sample MW-146-1-2013
(2) DRO (AK102)
Package Bottles
DTB 19.6' TC
late entry for well MRP-MW3
{1110} Insert tubing at intake
ZR 9/10/13 ~~1415~~ Start purging
{1144} Stable parameters & 3 casing volumes
pH 5.98 ORP -56 cond 0.244 Temp 8.83
Turb 0.0 NTU DO 0.00 mg/L Sal 0.01%
{1150} Collect Sample MRP-MW3-2013
(5) GRO (AK101)
(5) BTEX (8260C)
(2) DRO (AK102)
Package Bottles
Ellen Roelofs 9/10/13

September 10, 2013 Adak LTM 2013

1455 well MW-107-1

Conduct physical hazard survey

No hazards

PID 23.5 ppm wellhead 0.0 ppm breathing zone

DTW 18.60' TC

Insert tubing at intake 23.8' TC

1515 Start Purging

1536 Stable parameters

pH 5.95 cond 0.221 mS/cm ORP -38 mv Turb 0.0 NTU

Temp 6.54°C DO 0.00 mg/L Sal 0.01%

1540 Collect Sample MW-107-1-2013

(2) DRO (AK 102)

Package Bottles

DTB 29.00' TC

1605 well 03-778

Conduct physical hazard survey

Nails in lot, watch tires if park across road.

PID 1.0 ppm wellhead 0.0 ppm breathing zone

DTW 19.85' TC

1615 well 03-104

Conduct physical hazard survey

Nails in lot, be mindful when driving

PID 1.0 ppm wellhead 0.0 ppm breathing zone

DTW 19.80' TC

Insert tubing at intake 22.1

Elle Rolofs 9/10/13

September 10, 2013 Adak LTM 2013

1628 Start purging

1648 Stable Parameters

pH 5.77 cond. 0.255 mS/cm ORP -9 mv Turb 0.0 NTU

Temp 7.55 DO 0.00 mg/L Sal 0.01%

1650 Collect Sample 03-104-2013

1650 (2) DRO (AK 102)

Package Bottles

DTB 24.75' TC

1710 Back to Apartments

1815 Photo Log by Elle Roelofs

0844 RW-102-4 topview

0901 HMW-146-1 topview

0923 MW-134-10 topview

1107 MRP-MW3 SE

1107 MRP-MW2 SE

1359 MW-146-1 topview

1455 MW-107-1 topview

1605 03-778 SE

1615 03-104 topview

~~1830~~ End of Day

{1725} Horriba Cal Check

Elle Rolofs 9/10/13

September 11, 2013 Adak LTM 2013

0800 Morning Meeting
QC Report
Health & Safety
PPE: Nitriles, safety vests, safety glasses, steal toed boots

0920 Horriba Cal Check

Time	pH	Temp	ORP	cond	turb	D.O	Sal
0920	3.74	12.70	268	3.19	0.0	5.51	0.17
1320	3.74	10.96	258	3.17	0.0	5.29	0.16
1510	3.72	11.01	265	3.16	0.0	5.12	0.16

PID 0.0 / 100 ppm

0925 Mob van

0930 Don Balmer & Elle Roelofs on site
SWMU 62 Sandy Cove
well 03-778
PID 0.0 both

0945 Insert tubing at intake 23.74' TC

0947 Start purging
Stable parameters
pH 6.21 temp 6.91°C ORP -83 Cond 0.273 mS/cm
Turb 0.0 NTU DO 0.00 mg/L Sal 0.01

1010 Collect Sample 03-778-2013
(2) DRO (AK102)
Package Bottles
DTB 27.72' TC

Elle Roelofs 9/11/13

September 11, 2013 Adak LTM 2013

1030 well MW-134-11
PID 0.0 both
Insert tubing at intake 20.025'

1045 Start purging
Stable parameters
pH 6.05 temp 7.52°C ORP -61 Sal 0.02%
cond 0.510 Turb 0.0 NTU DO 0.00 mg/L

1110 Collect Sample MW-134-11-2013
(2) DRO (AK102)
Package Bottles
DTB 21.58' TC

1140 Back to office

1340 E. Roelofs & D. Balmer arrive at well 03-619
Conduct physical hazard survey
No hazards besides fallen fence
PID 2.0 ppm wellhead 0.0 ppm breathing zone
Insert tubing at intake 19.4'
Start Purging

1408 Stable parameter
pH 5.73 cond 0.280 mS/cm Turb 0.0 NTU
DO 0.00 Temp 7.15°C Sal 0.01% ORP 173 mV

1410 Collect Sample 03-~~164~~ 619-2013 ER 9/12/13
(6) DRO (AK102) w/ MS/MSD
Package Bottle DTB 21.95' TC

Elle Roelofs 9/11/13

September 11, 2013 Adak LTM 2013

1500 Back to office

Photo Log by Ellu Roelofs

1029 SWMU 62 Sandy Cove overview W

1104 SWMU 62 Sandy Cove overview S

~~253~~ ER 9/11/13

1453 Eagle Bay Overview SE

1455 SWMU 62 Eagle Bay Overview NW

1455 SWMU 62 Eagle Bay Overview W

1455 SWMU 62 Eagle Bay Overview W2

END of Day

Ellu Roelofs 9/11/13

September 12, 2013 Adak LTM 2013

0900 Morning Meeting

Health & Safety

PPE: steal toed boots, nitriles, safety glasses

1000 Prepare chain of custody & package samples for shipping

1300 Samples to Alaska Airlines

1400 Paperwork in office

1700 End of Day

Ellu Roelofs 9/12/13

September 13, 2013 Adak LTM 2013

0900 Morning Meeting
QC Report
Safety & Health
PPE: Safety vest, Steel toed boots, safety glasses, nitriles

1000 Continue demobilization activities.

1500 End of Day

9/13/13

September 14, 2013 Adak LTM 2013

0900 Morning Meeting
Health & Safety

0930 Continue demobilization activities

1200 End of Day

9/14/13

NO FURTHER ENTRIES

Don Belmar

9/15/13

Rite in the Rain®
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JOURNAL
№ 390N

T066 AdaK LTM 2013
TEAM 3 OUA
Start: 8/26/13
End: 9/14/13

BOOK #3 - TEAM 3

PROJECT - ADAK LTM 2013

CONTRACT # - N44255-09-D-4005

TASK ORDER TO 66

NAVY INSTALLATION - FORMER NAVAL COMPLEX, ADAK, AK

SITE NAME - OUA

START DATE - 8/26/13

END DATE - 9/14/13

BOOK ASSIGNMENT - TEAM 3

JOHN HIGHSTONE

BARB SCHLEIGER

COMPANY - SEALASKA ENVIRONMENTAL SERVICES

ADDRESS - 18743 FRONT ST NE SE201
POULSBO, WA 98370

PHONE - 360-980-3300

REVIEWED BY: [signature] Tom

REVIEW DATE: 12-17-13

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17-20	AREA 303	8/29/13
21-29	AREA 303 & SWMU 60 Tank Farm, GCI	8/30/13
30-41	NMCB, SA 79, SWMU 60, South of Runway	8/31/13
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[signature] 11/25/13

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PAGE	REFERENCE	DATE
	PID - ION PHOTOCHECK 1000EX	
	SN # 08-01542	
	ASSET # 1088743	
	PUMP - Pegasus Peristaltic PUMP	
	Peg/Alex peri PUMP	
	PEG/ALEXIS PERI PUMP	
	# 1116408 TRS ENV.	
	MULTIMETER - HORIBA WATER QUALITY	
	MODEL # U-5000	
	HORIBA 52 Hgs ELDE05CD	
	ASSET# 1120873	
	PUMP - PEGASUS PERISTALTIC PUMP	
	PEG/ALEX PERI PUMP	
	# 113258	
	MULTIMETER - HORIBA W &	
	# 113-8214 HORIBA 52 #U 5000	
	MULTIMETER - HORIBA U22	
	MFG 7113002	
	PID - ION PHOTOCHECK 2000EV	
	#1111981	

ASF 12-18-13

Rite in the Rain®
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ALL-WEATHER
JOURNAL
FIELD BOOK

Name TEAM 3
JOHN HIGHSTONE, BARB SCHLEIGER

Address

Phone

Project T066 ADAK LTM 2013

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ASF 12-18-13

TO66 ADAK LTM 2013 8-26-13

0700 - ON SITE OFFICE MEETING

TAILGATE MEETING AND SAFETY BRIEF.

SSHO BRIEF - J. HIGHSTONE

- SLIPS TRIPS FALLS
- WELL HEADS LET VENT, PARK UPWIND
- PARKING IN THE WIND

WX 11 MPS WITH 20 MPH GUST HIGH OF 57°F RAIN

- PPE - NITRILE, VEST, SAFETY GLASSES STB

0830 - MOB VAN

- HORIBA CALIBRATION

	TIME	pH	SC mS/cm	TURB	DO mg/L	Temp °C	Sal %	ORP
*	0849	3.94	4.53	0.0	9.60	16.19	0.24	190
	1516	4.42	3.06	0.0	9.99	16.64	0.20	269
	NA							

0910 - PID BUMP TEST * AUTO CAL DSM & TO BUMP TEST

1015 - ARRIVE AT MW-1751-4 PID AT THE WELL CASING 0.1 ppm PID READING AT BREATHING ZONE IS 0.0 ppm [DTW 6.0'] [~~Current DTB 14.9'~~] After Sample

1105 - BEGIN PURGE FOR SAMPLE PARAMETERS USING PERISTALTIC PUMP PURGED 2L

1132 - PARAMETERS STABILIZED

8/26/13

TO66 ADAK LTM 2013 8/26/13

PARAMETERS: MW-1451-4-2013

pH 3.15, COND 0.141, TURB 0.0, DO mg/L 0.00, TEMP 8.84°C, SAL % 0.01, ORP 105 mV

1142 - BEGIN SAMPLING MW-1451-4-2013

- (3) 40 ML VOC BTEX (8260C)
- (2) 1L Amber w/HCL DRO (AK 102)
- (2) 1L amber glass PAH (17) (8270D SIM
- (1) 500 mL poly alkalinity SM2320D + sulfate 300.0
- (3) 40 mL VOC vials w/HCL (MOTHANE) RSK 175

TEST KIT RESULTS		
DO	FERROUS IRON	CO_2
2.0 ppm	0.1 ppm	25 ppm

1247 [DTB 14.9']

1248 - THERE IS A QUESTION ON THE HORIBA METER READING FOR pH AND ORP COMPARED TO TEAM 1 HORIBA. AND LAST YEARS DATA April 2013.

1250 - VISUAL INSPECTION WATER CLEAR NO ODOR, RUST COLORED SEDIMENT AT THE BOTTOM OF THE CONTAINMENT BUCKET. WATER DUMPED ON SITE

1252 - FORMER POWER PLANT PHOTOSTAKEN

8/26/13

TO66 ADAK LTM 2013 8/26/13

1532 - ARRIVE AT MW-1451-2

PID TOC 0.0ppm, PID BREATHING ZONE 0.0ppm

[DTW 6.06']

LATE ENTRY MW-1451-2
RECALIBRATED HORIBA
AND METER IS READING CORRECT
NO LONGER USING AUTO CALIBRATION

1616 SWITCHED TO ANOTHER HORIBA, LOND OFF METER TO STABALIZE SAMPLES
HORIBA # 113-8214 MBG UMPOT TURB.

LATE ENTRY MW-1451-4
SINCE TEAM 3 HORIBA WAS NOT ACCURATE WE HOOKED TEAM 1 HORIBA TO STABLE SAMPLE PARAMETER
pH 6.0, Cond 0.165, Turb 0.0,
DO 0.0, TEMP 9.63°C, Sal 0.01 %

1717 PARAMETERS STABILIZED

1720 COLLECT SAMPLES MW-1451-2-2013
AND DUP MW-1451-12-2013

- (3) 40ML VOC BTEX 8260C
- (2) 1L amber w/ HCL DRO (AK102)
- (2) 1L amber PAH(17) 8270D SIM

8/26/13

TO66 ADAK LTM 2013 8/26/13
CONT.

- (1) 500mL Poly alkalinity SM2320D and Sulfate 300.0
- (3) 40 ML VOC amber w/ HCL (RSK175 Methane)

DUPLICATE COLLECTED MW-1451-12-2013

- (1) 500mL Poly (alkalinity SM2320B and Sulfate 300.0
- (3) 40 ML VOC amber HCL PRES. (METHANE RSK175)

1752 TEST KIT RESULTS

	DO ppm	Fe^{2+} ppm	CO_2 ppm
	0.0 ppm	30 ppm	100 ppm
DUP	0.0 ppm	30 ppm	100 ppm

1814 - [DTB 14.42 Feet]

1817 - PHOTO'S TAKEN FOR LOG

1824 - [DTW 5.24'] MW-1451-3
[DTB 13.62']

1827 [DTW 5.29'] MW-1451-6
[DTB 13.55']

1829 [DTW 8.77'] MW-1451-9
[DTB 16.15']
[DTP 8.75] ≥.02 NO SAMPLE

1834 ARRIVED AT OFFICE FOR DEMOB

8/26/13

T066 ADAK LTM 2013 8/26/13

PHOTO LOG:

WELL	DIRECTION	TIME
MW-1451-4	FACING NORTH	1350
MW-1451-2	FACING NORTH	2053

2000- END OF DAY

8-26-13

T066 ADAK LTM 2013 8/27/13 ~~8/26/13~~

0700 - ARRIVE OFFICE FOR MORNING BRIEF
REVIEW DAY PRIOR DATA COLLECTION

0822 - TAILGATE SAFETY BRIEF
SSHO J. HIGHSTONE

- SLIPS TRIPS & FALLS
- WATER AND PFD
- COW PARSNIPS CAUTION REACTION
- WIND HAZARDS STAY UP WIND WEL
- DOORS HEAVY AT BUNKER
- CHEMICAL HAZARDS
- KNOW FIRST AID AND EXTINGUISHERS
- PPE - STB, SAFETY GLASSES, NITRILE WHEN REQUIRED PFD

WEATHER 57° OVERCAST HUMID

TIME	HORIBA CALIBRATION						
0855	PH	COND	TURB	DO	TEM	SAL	ORP
0857	4.0	4.56	0.1	8.37	16.60	0.2	236
1422	3.99	4.50	0.0	7.63	18.19	0.2	222
1712	3.96	4.63	0.0	7.23	18.77	0.2	210

USING HORIBA U22 FOR WELLS
MFG 7113002

0920 - PID BUMP TEST 109 PPM
0945 - ON SITE MW-1451-3
0952 - PID 0.0 PPM AT WELL HEAD AND IN BREATHING ZONE

8/26/13

T066 ADAK CTM 2013 8/27/13

0955 - [DTW 5.27']

1002 - BEGIN STABILIZATION PARAMETERS

~~1045~~ 1040 - PARAMETERS STABILIZED

- (3) 40ML VOC AMBER BTEX (8260C)
- (2) 1L amber w/HCL DRO (AK 102)
- (2) 1L amber PAHs (17) (8270D SIM)
- (1) 500mL poly (alkalinity SM 230B + Sulfate 300.0
- (3) 40ml amber VOC w/HCL Methane RSK 175

TEST KIT RESULTS		
DO	Fe^{2+}	CO_2
1.0 ppm	5 ppm	20 ppm

PARAMETERS - 3L purged
pH 6.40, Cond 0.667, Turb 41.2,
DO 0.00, Temp 11.67°C, Sal 0.0%,
ORP -6

1045 - Samples collected MW-1451-3-2013

1125 - PHOTO TAKEN FOR PHOTO LOG

1138 - ARRIVE AND SET UP AT MW-1451-6-2013

1140 - PID AT WELL CASING 3.5 ppm
PID IN BREATHING ZONE 0.0ppm

1142 - [DTW 5.29] Trace product measured.

1145 - Collect water to Stabalize Parameters

1236 - Parameters Stabilize & Purge 4.5gal

8/27/13

T066 ADAK CTM 2013 8/27/13

1238 - Collect samples MW-1451-6-2013

- (2) 1L amber w/HCL DRO (AK 102)
- (1) 500ml poly (Alkalinity SM 2320B)
- (3) 40ml VOC w/HCl (methane) RSK 175

1252 -

TESTKIT RESULTS (ppm)		
DO	Fe^{2+}	CO_2
1.0 ppm	50 ppm	75 ppm

1236 LATE ENTRY - MW-1451-6
PARAMETERS: pH 6.18, Cond 0.524
Turb 38.5 DO 0.0 Temp 10.09
Sal 0.0%, ORP -109

1303 - PHOTO TAKEN OF WELL MW-1451-6-2013

1422 - CALIBRATE HORIBA U-22

1450 - AT SITE MW-303-43

1500 - REALIZED HORIBA WAS CONNECTED TO THE SAMPLE PORT FOR MW-1451-2, MW-1451-3 AND MW-1451-4 WE ARE GOING BACK TO RESAMPLE THESE THREE WELLS.

1528 - ON SITE @ MW-1451-2

1541 - BEGINE ~~Collecting~~ stabilizing parameters.

8/27/13

TO 66 ADAK LTM 2013 8/27/13

1615 - PARAMETERS STABALIZED

1615 - Collect samples MW-1451-2-2013

- (3) 40 ml VOC w/HCL BTEX (8260C)
- (2) 1L amber w/HCL DRO (AK 102)
- (2) 1L amber w/ PAHs (17) (8270D SIM)
- (1) 500 ml poly Alkalinity SM2320B plus Sulfate 300.0
- (3) 40 ml VOC w/ HCl (Methane) RSK 175

1620 - Collect DUP MW-1451-12-2013

- (1) 500ml poly (Alkalinity) SM2320B plus Sulfate 300.0
- (3) 40 ml VOL amber w/ HCL (methane) RSK 175

PARAMETER STABALIZED MEASURE pH 6.20, COND 0.90, TURB 87.9, DO 0.0, TEMP 12.14, Sal 0.0 ORP -123

TEST KIT RESULTS		
DO ppm	Fe ppm	CO_2 ppm
0.00 ppm	40 ppm	100 ppm

1652 - LEAVE SITE

1703 - ARRIVE AT OFFICE FOR DEMOB

8-27-13

TO66 ADAK LTM 2013 8-27-13

PHOTO LOG

WELL	DIRECTION	TIME
MW-1451-3	NORTH	1125
MW-1451-6	NORTH	1303

1900 - END OF DAY FOR J. HIGHSTONE, B. SCHLEIGER

8-27-13

T066 ADAK LTM 2013 8/28/13

0700 - OFFICE MORNING BRIEF

0738 - SSHO JOHN HAGGSTONE
TAILGATE SAFETY BRIEF LOG
IN SAFETY LOG
PPE - MODIFIED LEVEL-D
WX - OVERCAST 62°F NNE
WIND 92° HUMIDITY

TIME HORIBA CALIBRATION

	PH	COND	TURB	DO	TEMP	SAL	ORP
0812	4.00	4.47	0.0	7.32	16.04	0.2	237
1341	3.97	4.50	0.8	7.26	14.11	0.2	238
1807	3.96	4.49	0.0	7.81	14.40	0.2	232

0815 - PID BUMP TEST 111ppm

0822 - AT MW-303-40 NOTED LABEL IS INCORRECT AND WENT BACK TO OFFICE FOR CLARIFICATION AND WELL CONSTRUCTION LOGS

0850 - ONSITE MW-303-44 [DTW 29.94']

0857 - ONSITE MW-303-42 [DTW 28.95']

0905 - ONSITE MW-303-43 [DTW 29.01']

0921 - ONSITE AT MW-303-42 CHANGED ABSORBENT SOCK AT WELL

0929 - ONSITE AT MW-303-40 [DTW 6.96']

0938 - ONSITE AT MW-303-41 [DTW 20.0']*

*See late entry on Page 21 (SM)

8/28/13

T066 ADAK LTM 2013 8/28/13

CONT.

MW-303-41 WELL CONTAINS RUST COLORED DEBRIS AT THE WATER LEVEL

1000 - ON SITE AT MW-303-30 [DTW 27.59']

1019 - ONSITE AT MW-1451-3 [DTW 3.91']
PID AT WELL HEAD AND BREATHING ZONE 0.0.
PERFORMED HAZARD AND PHYSICAL SURVEY OF SITE.
DTW METER IS SHOWING PROBLEM CLEANED AND TAKING BACK TO OFFICE FOR BATTERY REPLACEMENT AND METER CHANGE IF NECESSARY

1050 - ON SITE AT MW-1451-3

1059 - BEGIN COLLECTING STABILIZATION PARAMETERS FOR RESAMPLE

1150 - PARAMETERS STABILIZED (SM 8/28/13)
PURGED 4.5 Gallons MW-1451-3-2013

1152 - BEGIN COLLECTING SAMPLES
PARAMETERS AT: pH 6.63, Cond 0.762 mS/cm, Turb 1.7 NTU, DO 0.0 mg/L
Temp 9.69 °C, Sal 0.0 %, ORP 22 mV

TEST KIT RESULTS		
DO ppm	Fe^{2+} ppm	CO_2 ppm
1.0 ppm	ppm	8 ppm

8/28/13

T066 ADAK LTM 2013 8/28/13

1224 - HEADING BACK TO OFFICE

1353 - ON SITE AT MW-1451-4 ~~8/28~~ 8/28/13

PID READING AT CASING AND BREATING ZONE IS 0.0 ppm

1355 - PERFORMED HAZARD AND [DTW 6.03'] PHYSICAL SURVEY OF SITE.

1406 - BEGIN COLLECTING PARAMETERS

LATE ENTRY MW-1451-3-2013

SAMPLES COLLECTED

- (3) 40 ml BTEX (8260C) w/ HCL
- (2) 1L amber DRO (AK 102) w/HCL
- (2) 1L amber PAHs (17) (8270D SIM)
- (1) 500 ml poly (Alkalinity SM2320B + SULFATE 300.0
- (3) 40 ml VOC w/HCL RSK 175

1437 - PARAMETERS STABILIZED

1440 - COLLECT SAMPLES ~~MW-1451-4-2013~~

MW-1451-4-2013

2.5 GALLONS PURGED, pH 5.90, COND 0.369 mS/cm, TURB 0.1 NTU, DO 0.00 mg/L, TEMP 7.01 °C, Sal 0.0 %, ORP -33 mV

- (3) 40 ML VOC w/HCL BTEX (8260C)
- (2) 1L amber w/HCL DRO (AK102)

8/28/13

T066 ADAK LTM 2013 8/28/13

CONT.

- (2) 1L amber w/ PAHs (17) (8270D SIM)
- (1) 500 ML poly (alkalinity SM2320B) + (Sulfate 300.0)
- (3) 40 ml VOC w/ HCL (METHANE RSK 175)

1521 - ON SITE AT MW-1451-9

PERFORMED VISUAL INSPECTION

1525 - PHOTO TAKEN FOR PHOTO LAB

PID 0.3 ppm wellhead and PID 0.0 ppm breathing zone

1542 - ARRIVE MW-303-43

PID wellhead 0.0, 0.0 breathing zone

1550 - SET UP TO collect stabilization Parameters [DTW 29.01']

1605 - BEGIN COLLECTING PARAMETERS

1619 - PERFORMED HAZARD AND PHYSICAL SURVEY INSPECTION

1633 - Stabilized Parameters @ 8/28/13

1634 - BEGIN SAMPLING MW-303-~~43~~-2013

PARAMETERS: Purge 1.00 gal, pH 5.47, Cond. 0.335 mS/cm, Turb. 1.1 NTU, DO 0.00 mg/L, Temp 8.31 °C, Sal. 0.0% ORP 80 mV SAMPLES collected

- (3) 40 ml VOC amber HCL (methane) RSK 175
- (3) 40 ml VOC Amber w/HCL GRO (AK101)

8/28/13

T066 ADAK LTM 2013 8/28/13

Cont

(1) 500ml poly (Alkalinity SM 2320B and Sulfate 300.0C)

TEST KIT RESULTS		
DO	Fe^{2+}	CO_2
2.0 ppm	0.6ppm	60ppm

1726 - PHOTO TAKEN OF MW-303-43 FOR PHOTO LOG

1740 - WENT TO WASTE BUNKER TO DISPOSE OF WATER FROM SITE FORMER POWER PLANT WATER MIXED WITH PRESERVATIVES. DISPOSED OF PPE GLOVES AND TUBING. [DTB - 33.81']

1755 - AT OFFICE FOR DEMOB

1830 - AT WELL MW-303-30 TO INSTALL SOCK.

1840 - AT UNIT FOR PAPERWORK AND PICS

PHOTO LOG:

~~TIME~~ JH 8-28-13 WELL	DIRECTION	TIME
MW-1451-9	NORTH	1522
T-1451 OVERVIEW #1	WEST	1523
T-1451 OVERVIEW #2	WEST	1523
T-1451 OVERVIEW #3	SOUTH	1525

1900 - END OF DAY: J. HIGHSTONE, B. SCHLEIGER

John A Gilstrap 8-28-13

T066 ADAK LTM 2013 8/29/13

0700 - AT OFFICE FOR MORNING BRIEF

0739 - SAFETY BRIEF SSHO John Highstone. TAILGATE BRIEF HELD AND LOGGED INS HEALTH AND SAFETY LOG BOOK. PPE IS MODIFIED LEVEL D. WX 54°F AND LIGHT WIND.

HORIBA CALIBRATION

TIME	PH	COND	TURB	DO	TEM	SAL	ORP
0805	3.97	4.51	0.0	7.59	13.38	0.2	249
1320	3.98	4.53	0.0	7.73	12.23	0.2	240
NA							→

0815 - PID BUMP TEST - 121ppm

0829 - ONSITE AT MW-303-44 SET UP TO collect parameters USING PARKSTALTIC PUMP LOW FLOW. [DTW ~~29~~ 29.54']

0904 - PERFORMED HAZARD AND PHYSICAL SURVEY INSPECTION

0933 - PARAMETERS STABILIZED PURGED 0.750 gal., pH 5.83, Cond. 0.387 mS/cm, Turb. 5.4 NTU, DO 0.0 mg/L, TEMP. 8.02°C, Sal. 0.0%, ORP. 11 mV

0935 - Collect samples MW-303-44-2013

8/29/13

T066 ADAK LTM 2013 8/29/13

- (3) 40 ml Amber w/HCL GRO (AK101)
- (3) 40 ml Amber w/HCL (METHANE) RSK 175
- (1) 500 ml Poly (alkalinity SM 2320B
  Sulfate 300.0 [DTB 33.5']

1013 - PHOTO TAKEN FOR PHOTO LOG

TEST KIT RESULTS		
DO	Fe^{2+}	CO_2
1.0 ppm	2.0 ppm	45 ppm

1024 - ONSITE MW-303-40 [DTW 6.96']

1045 - BEGIN COLLECTING PARAMETERS USING LOW FLOW PERISTALTIC PUMP. RUST color sediment in bucket.

1050 - PERFORMED HAZARD AND PHYSICAL SURVEY INSPECTION Military FLAT NEXT TO WELL.

LATE ENTRY
PID 0.4 ppm at wellhead 0.0 ppm breathing

1150 - PARAMETERS STABILIZED, PURGE 5 gal had to ∆ Peristaltic pump
Oily sheen observed in the bucket while parameters are collected

1153 - Collected Samples MW-303-40-2013
- (3) 40 ml amber w/HCL GRO (AK101)
- (3) 40 ml amber w/HCL BTEX (8260C)

8/29/13

T066 ADAK LTM 2013 8/29/13
cont.

- (3) 40 ml amber w/HCL (methane) RSK 175
- (1) 500 ml Poly TOTAL LEAD (EPA 6020A) w/HNO_3
- (1) 500 ml Poly DISSOLVED LEAD (EPA 6020A) w/HNO_3
- (1) 500 ml Poly (alkalinity SM 2320B, Sulfate 300.0)
- (2) 1 L Amber Dibenz(a,b) anthracene

~~1110 BA~~ 8/29/13

1154 - performed

TEST KIT MEASUREMENTS		
DO	Fe^{2+}	CO_2
1 ppm	2 ppm	25 ppm

~~1210 BACK TO~~ BB 8/29/13

1217 - PHOTO TAKEN FOR PHOTO LAB [DTB 17.90']

1231 - RETURNED TO OFFICE FOR DEMOB AND PACKING COOLERS FOR SHIPPING TO THE LAB.

LATE ENTRY MW-303-40-2013
PARAMETERS FOR ~~MW-303-40~~
pH 5.95, Cond. 0.348 mS/cm, Turb. 9.9 NTU,
DO 0.00 mg/L, TEMP 9.77 °C,
Sal 0.0%, ORP 48 mV.

1400 - SAMPLES READY TO SHIP.

1830 - AT UNIT FOR PAPERWORK AND PHOTO LOG.

8-29-13

TO66 ADAK LTM 2013 8-29-13

PHOTO LOG:

WELL	DIRECTION	TIME
MW-303-44	SOUTH	1012
MW-303-40	NORTH	1216

1900 - END OF DAY

8-29-13

TO66 ADAK LTM 2013 8/30/13

LATE ENTRY

WE HAD DTW AT WELL MW-303-41 OF 20.0' ON THE 8/28/13 USE. WELL PROBE CAME UP WITH RED DEBRIS ON IT. TEAM 1 WENT ~~TO~~ TO THE WELL FOR SAMPLES AND DETERMINED THE WELL TO BE DRY AND COMPLETED WELL INSPECTION LOG

0700 - AT MORNING SAFETY BRIEF AND LESSONS LEARNED FOR GC AND ASSIGNMENTS FOR THE WORK DAY SSHO J. HIGHSTONE - TAILGATE MEETING HELD AND LOGGED IN THE HEALTH AND SAFETY LOG. PPE MODIFIED LEVEL D

0725 - EARTHQUAKE DURING MEETING DISCUSSION OF SHOES AND FLASH LIGHT BY THE BED. WX - WIND 11-24 MPH GUST OVERCAST WITH SHOWERS OFF AND ON AND HIGH of 59°F

HORIBA CALIBRATIONS

TIME	PH	COND	TURB	DO	TEMP	SAL	ORP
0700	3.99	4.50	0.0	7.56	15.01	0.2	244
1455	3.95	4.50	0.0	7.52	16.06	0.2	234
1815	3.99	4.49	0.3	7.62	17.09	0.2	249

8/30/13

T066 ADAK CTM 2013 8-30-13

PID BUMP TEST: 119 PPM

0842 - ON SITE AT MW-303-30
SET UP TO MEASURE, REMOVE SOCK, PARAMETERS USING LOW FLOW PARISTALTIC PUMP [DTW 27.62'] TRACE PRODUCT PID AT WELL HEAD 0.8 ppm PID AT BREATHING ZONE 0.0 ppm

0916 - PARISTALTIC PUMP IS NOT WORKING AND REQUESTED REPLACEMENT PUMP TO BE BROUGHT OUT TO SITE.

0929 - BEGIN COLLECTING STABILIZATION PARAMETERS ~~400ml/min for 5 min.~~ BS 8/30/13 300ml/min 4 min.

1008 - WELL DID NOT STABILIZE GAL. PURGED 2.33 gal plus 0.25 prior to initial

1010 BEGIN COLLECTING SAMPLES FOR MW-303-30-2013
- (3) 40 ml amber w/HCL GRO (AK 101)
- (3) 40 ml VOC w/HCL BTEX (8260C)
- (3) 40 ml VOC w/HCL (Methane) RSK 175
- (2) 1L amber w/P Dibenz (a, h) anthracene (8270D SIM)
- (1) 500 ml Poly Total lead (EPA6020A)

8/30/13

T066 ADAK CTM 2013 8/30/13
CONT.
- (1) poly 500 ml Dissolved lead (EPA6020A)
- (1) 500 ml poly Alkalinity SM 2320B Sulfate 300.0C)

TEST KIT RESULTS		
DO	Fe^{2+}	CO_2
0.05 ppm	20 ppm	150 ppm

[DTB 34.97'] IRON DILUTION FACTOR X10

1052 - PHOTO TAKEN FOR PHOTO LAB

1057 - ON SITE AT WELL 653 LOCATED AS SWMU 60, TANK FARM A SITE PID 0.0 ppm at well head and at breathing zone. REMOVED SOCK FROM WELL.
[DTW 11.79'] [DTP 11.74']
[DTB 17.74'] NO SAMPLES TAKEN
COMPLETED WELL INSPECTION CHECK list AND SURVEY OF HAZARDS

1111 - PHOTO TAKEN FOR PHOTO LOG

1112 - ON SITE AT 652 SWMU 60 Location PERFORMED WELL INSPECTION CHECKLIST, PID 0.0 ppm at well head and breathing zone.
[DTW 9.55] [DTP 9.52']

8/30/13

T066 ADAK LTM 2013 8/30/13
CONT.

[DTB 15.05'] The thickness of PRODUCT IS 0.03' AND NO SAMPLING PERFORMED AT THIS WELL. PERFORMED THE INSPECTION HAZARD AND PHYSICAL SURVEY.

1135 - PHOTO TAKE FOR PHOTO LOG
1139 - ONSITE AT 650 LOCATED AT SITE SWMU 60 TANK FARM A. TO PERFORM WELL INSPECTION CHECKLIST AND INSPECTION FOR PHYSICAL AND HAZARD SURVEY. NO VISUAL HAZARDS
1141 - PID 0.0ppm Breathing ZONE and WELLHEAD.
1144 - [DTW 10.00'] 650
1147 - PHOTO TAKEN FOR PHOTO LOG
1329 - ONSITE TO COLLECT PARAMETERS 650 USING low flow PERISTALTIC PUMP
1400 - 400 ml/min for 5 min BEGIN Collecting Parameters
1415 - STABILIZED PARAMETERS
1417 - Collect SAMPLES 650-2013
- (3) 40 ml VOC w/HCL BTEX (8260C)

8/30/13

T066 ADAK LTM 2013 8/30/13
CONT

- (2) 1L w/HCL DRO (AK102)
- (2) 1L UP PAHs (17) (8270D SIM)

Purged 1.5 gal, pH 6.23 Cond. 0.934 mS/cm, Turb 31.9 NTU, DO 0.00 mg/L
Temp 7.92 °C, ~~Sal 0.00~~ BB 8/30/13
SAL 0.00 %, ORP -84 mV

LATE ENTRY
PARAMETERS FOR MW-303-30-2013
pH 6.14, Cond 0.495 mS/cm, Turb 49.9 NTU, DO 0.0 mg/L, Temp 8.05 °C, Sal 0.0%, ORP -89 mV

BB 8/30/13 ~~DTW FOR 6~~ [DTB 15.80']
FOR WELL 650

1507 - ONSITE 04-701 [DTW 14.31']
1513 - PHOTO TAKEN FOR PHOTO LAB
WELL INSPECTION CHECKLIST Complete
1522 - ONSITE 04-201 FOR WELL INSPECTION [DTW 25.94']
[DTB 33.10'] current, PID 2.4 wellpoint 0.0 ppm breathing
1536 - PHOTO TAKEN AT SITE FOR PHOTO LOG
1527 - ONSITE 04-204 well inspection PERFORMED PID 88.6 PPM at well head after 15 Minutes of letting breath 0.0 PPM breathing zone

8/30/13

T066 ADAK LTM 2013 8/30/13
CONT.
[DTW 26.02'] [DTP 26.01']
[DTB 33.05'] TAKEN AT WELL
INSPECTION. BOTTOM OF WELL IS
a Hard bottom.
1532. ON SITE AT 04-202 TO
PERFORM WELL INSPECTION
CHECKLIST. PID 29.2 ppm at
wellhead after letting breath
for 10 minutes 0.0 ppm at
breathing zone. [DTW 26.28']
Trace product [DTB 33.42']
Hard well bottom
1548 - PHOTO TAKEN FOR PHOTO LOG
1533 - ON SITE 04-203 TO
PERFORM WELL INSPECTION
CHECKLIST. PID 7.8 ppm at
well head ~~after~~ 8/30/13 breathing
ZONE PID 0.0 ppm [DTW 26.59']
TRACE PRODUCT [DTB 35.32']
Soft bottom.
1542 - PHOTO TAKEN FOR PHOTO LOG
1600 - ON SITE ~~04-20~~ 8/30/13 at
04-211 [DTW 24.02']
1603 - TOOK PHOTO FOR LOG
8/30/13

T066 ADAK LTM 2013 8/30/13
1606 - ON SITE AT 04-210
TO PERFORM WELL INSPECTION
CHECKLIST. PID AT THE WELLHEAD
AND BREATHING ZONE 0.0 ppm
[DTW 24.96'] TRACE PRODUCT
[DTB 33.05'] SOFT BOTTOM
1615 - PHOTO TAKEN FOR THE PHOTO
LOG.
1618 - ON SITE 04-213 TO PERFORM
THE WELL INSPECTION CHECK LIST
PID AT THE WELLCASING
AND BREATHING ZONE 0.0 ppm
[DTW 24.06'] TRACE PRODUCT
[DTB 29.95'] HARD BOTTOM
1634 - PHOTO TAKEN FOR PHOTO LOG
2 OF THE 9/16" bolts stripped
1616 - ON SITE 04-100 TO PERFORM
THE WELL INSPECTION CHECKLIST
PID READING AT THE
WELLHEAD 82.1 ppm AFTER
8 MINUTE WELL BREATH
0.0 ppm AT THE BREATHING ZONE
[DTW 28.38'] TRACE product
[DTB 34.57'] HARD BOTTOM
1627 - PHOTO TAKEN FOR PHOTO LOG
8/30/13

T066 ADAK LTM 2013 8/30/13

1657 - ON SITE AT Z3-6
TO PERFORM WELL INSPECTION CHECKLIST PID 0.3 ppm AT THE WELLHEAD AND 0.0ppm AT THE BREATHING ZONE
[DTW 7.25'] TRACE PRODUCT
[DTB 10.65'] HARD BOTTOM

1703 - PHOTO TAKEN FOR PHOTO LOG

1708 - BACK TO THE OFFICE FOR DEMOB AND PAPERWORK.

PHOTO LOG:

WELL	DIRECTION	TIME
MW-303-30	NORTH	1051
653	WEST	1111
652	EAST	1135
650	EAST	1147
04-701	EAST	1513
04-201	EAST	1526
04-203	WEST	1542
04-202	EAST	1548
04-204	NORTH	1553
04-211	EAST	1603
04-210	SOUTH	1615
04-100	EAST	1627
04-213	EAST	1634

8/30/13

T066 ADAK LTM 2013 8-30-13

PHOTO LOG CONTINUED:

WELL	DIRECTION	TIME
Z3-6	SOUTH	1702
FIELD WORK	SOUTH	1703

1900 - END OF DAY

8-30-13

T066 APAK UTM 2013 8/31/13

0700 - OFFICE BRIEF AND REVIEW OC

0721 - Safety BRIEF HELD AND LOGGED IN THE SAFETY AND HEALTH LOG. PPE MODIFIED LEVEL D. SSHO JOHN HIGHSTONE. 8/31/13

~~0837~~ - ONSITE 3479 MAIN ROAD 8/31/13

0807 - PIPELINE FOR SHORELINE/~~SEEP~~

0810 - INSPECTION. CONDUCT INSPECTION

~~0810 - Con~~ 8/31/13 NO SEEP LOCATED.

0825 - ONSITE TO CONDUCT SHORELINE AND SEEP INSPECTION OF SWMU 60 TANK FARM A SEEP LOCATED AND Completed SEEP AND SHORLINE INSPECTION CHECKLIST AND PHOTOS TAKEN

0900 - ONSITE SOUTH OF THE RUNWAY 18-36 TO complete SHORELINE AND SEEP INSPECTION. SEEP LOCATED AND SEEP AND SHORELINE INSPECTION CHECKLIST COMPLETED. SIZE AND LOCATION OF THE SEEPS WERE MARKED ON THE SHORELINE MAP.

1008 - ON SITE NMCB-09 TO PERFORM

T066 APAK UTM 2013 8/31/13

CONT.

WELL INSPECTION CHECK LIST. CONDUCT INSPECTION HAZARD AND PHYSICAL SURVEY - LOCATION HAS multiple PIECES OF METAL AND CONCRETE DEBRIS INSIDE THE PROTECTION BOLLARDS AND AROUND GENERAL VICINITY OF THE WELL.

1022 - PID pump TEST 109 ppm PID AT THE WELL HEAD 1.7 ppm AND 0.0 ppm IN BREATING ZONE

8/31/13 ~~DTBD 18.60'~~ ~~NO PRODUCT~~

DTB 18.60' HARD BOTTOM

DTW 9.67' NO PRODUCT

1032 PHOTO TAKEN FOR PHOTO LOG

1035 ON SITE NMCB AT WELL 02-300 TO PERFORM HAZARD AND PHYSICAL SURVEY INSPECTION. AREA AROUND WELL INSIDE BOLLARDS IS CLEAR. AREA IN GENERAL VICINITY OF THE WELL HAS SEVERAL PIECES OF METAL DEBRIS

PID AT WELL HEAD 2.2 ppm

8/31/13

TO66 ADAK CTM 2013 8/31/13
CONT.
PID AT BREATHING ZONE 0.0ppm
[DTW 10.27'] PRODUCT IN WELL
THICKNESS 0.44'
[DTP 9.83']
[DTB 12.56'] HARD BOTTOM
1042 - PHOTO TAKEN FOR PHOTO LOG
1046 - ONSITE NMCB AT WELL
~~02~~ BS 8/31/13 NMCB-11
TO CONDUCT WELL INSPECTION
1047 HAZARD AND PHYSICAL SURVEY
INSPECTION: PERFORMED THE
AREA INSIDE PROTECTION
BOLLARDS IS CLEAR OF
DEBRIS. AREA AROUND
THE GENERAL VICINITY HAS
MANY PIECES OF SCRAP
METAL.
PID AT WELLHEAD IS 3.8ppm
PID AT BREATHING ZONE 0.0ppm
[DTW 9.26']
[DTP 9.23'] product thickness
0.03'. [DTB 18.82']
1053 - PHOTO TAKEN FOR PHOTO LOG
1056 - ONSITE NMCB 02-816
8/31/13

TO66 ADAK CTM 2013 8/31/13
TO PERFORM WELL INSPECTION CHECKLIST
PERFORMED Hazard and physical
SURVEY INSPECTION. DEBRIS LOCATED
INSIDE WELL BOLLARDS AND AROUND
THE GENERAL AREA. METAL AND
PLASTIC AND GARBAGE
PID 1.2ppm at well head, PID
0.0 at breathing zone.
[DTW 10.60'] TRACE PRODUCT
[DTB 17.43'] HARD BOTTOM
1103 - PHOTO TAKEN FOR PHOTO LOG
1106 - ONSITE NMCB 02-478
TO PERFORM WELL INSPECTION
CHECK LIST AND Hazard and
(PA) 8/31/13 ~~Survey of~~ physical survey
INSPECTION - AREA CLEAR
PID 0.4ppm at well
PID 0.0ppm breathing zone
[DTW 7.83'] TRACE PRODUCT
[DTB 13.65'] HARD BOTTOM
1114 - PHOTO TAKEN FOR LOG
~~1114 - ONSITE AT~~ (PA) 8/31/13
1117 - ONSITE NMCB AT ~~NMCB-12~~ (PA) 8/31/13
AT WELL NMCB-12 TO PERFORM
WELL INSPECTION. History and physical
8/31/13

TO66 ADAK CTM 2013 8/31/13
Cont.
Survey performed. piece of plastic siding 8' from the well
PID 0.0ppm at well head and at breathing zone.
[DTW 14.18'] NO PRODUCT
[DTB 20.38'] HARD BOTTOM
1123 - PHOTO TAKEN AT SITE FOR THE PHOTO LOG.
1125 - ON SITE NMCB 02-815 TO PERFORM WELL INSPECTION THE HAZARD AND PHYSICAL SURVEY INSPECTION PERFORMED THERE ARE NO HAZARDS AROUND THE WELL.
PID READING 2.3 ppm AT THE WELLHEAD AND 0.0ppm AT THE BREATHING ZONE
[DTW 13.90'] TRACE PRODUCT
[DTB 19.69'] HARD BOTTOM
1133 - PHOTO TAKEN FOR PHOTO LOG
1134 - ON SITE AT NMCB 02-479 TO CONDUCT WELL INSPECTION HAZARD AND PHYSICAL SURVEY INSPECTION CONDUCTED AND

8/31/13

TO66 ADAK CTM 2013 8/31/13
THERE ARE NO HAZARDS AT THIS SITE. PID 0.0ppm AT WELLHEAD AND BREATHING ZONE.
[DTW 12.78'] Trace PRODUCT
[DTB 19.57'] Soft Bottom
1143 - PHOTO TAKE FOR PHOTO LOG
1150 - BACK TO OFFICE FOR DEMOB
HORIBA CALIBRATION

TIME	PH	COND	TURB	DO	TEMP	SAL	ORP
1332	4.00	4.49	0.0	7.72	15.71	0.2	249
1523	3.92	4.57	0.0	7.23	15.99	0.2	224

1342 ON SITE SWMU 60, TANK FARM A WELL 650. RETAKE SAMPLES SINCE THE PARAMETERS WERE NOT MET.
1342 - PID 0.2ppm at wellhead and PID 0.0 AT BREATHING ZONE
[DTW 9.85'] TRACE PRODUCT
1353 - SET UP TO Sample AND Collect PARAMETERS
1355 - Collect PARAMETERS USING Low Flow PERISTALTIC PUMP 400ml EVERY 5 MIN Flow rate
1425 - Parameters collected AND STABILIZED
1427 - BEGIN Collecting Samples for

8/31/13

TO66 ADAK LTM 2013 8/31/13
CONT.

650-2013 WELL SWMU 60 Tank farm
- (2)1L AMBER UP PAHs (17 & 270 SIM)
- (2)1L amber w/HCL DRO (AK 102)
- (3)40mL amber w/HCL VOC 8260C BTEX

PARAMETERS: 6.12 pH, 0.99 Cond, 39.6 NTU Turb, 0.0 mg/L DO, 8.67°C Temp, 0.0% SAL, 103mV ORP.

1455 - BACK TO THE OFFICE FOR DEMOB AND PHOTO LOG

PHOTO LOG SHORELINE INSPECTION
~~TIME~~ 8/31/13

SA 79 SHORELINE INSPECTION
~~TIME~~ ~~DIRECTION~~
~~0816~~ ~~BA~~ 8/31/13

TIME	VIEW	COMMENT
0816	N	
0817	W	FACING OVER ONSHORE
0818	W	ROCKS AT SHORELINE
0818	N	
0819	S	FACING FUEL DOCK
0820	N	
0820	N	
0820	N	
0821	W	

8/31/13

TO66 ADAK LTM 2013 8/31/13

CONT.

TIME	VIEW	COMMENT
0822	W	
0823	W	
0824	W	

SWMU 60 SHORELINE INSPECTION

TIME	VIEW	COMMENT
0825	W	
0827	W	SOUTH END BOOM 6
0828	N	N. END BOOM 6
0828	W	
0829	W	
0829	W	
0833	W	
0833	W	
0834	W	
0835	W	BOOM #10
0835	W	BOOM #10
0835	N	SEEP AT SHORELINE
0836	S	COLLAPSED CULVERT
0836	S	COLLAPSED CULVERT
0837	W	SEEP
0837	S	SEEP
0838	N	
0838	W	SEEP
0839	N	

8/31/13

TO66 ADAK LTM 2013 8/31/13
CONT. SWMU 60 SHORELINE INSPECTION

TIME	VIEW	COMMENT
0839	N	WASHOUT Collapsed
—	—	culvert west bank
0840	W	collapsed culvert
0841	N	
0841	N	
0842	E	
0842	E	
0842	E	
0843	S	Boom #10 OVERVIEW
0843	S	Boom #10 OVERVIEW

SOUTH OF RUNWAY 18-36

TIME	VIEW	COMMENT
0856	W	
0857	W	
0857	W	OLD PIPELINE
0858	W	OLD PIPELINE
0900	W	
0900	W	
0901	W	N. END Boom #6
0902	W	RECOVERY TRENCH
0903	W	
0904	E	Boom #6
0904	W	

8/31/13

TO66 ADAK LTM 2013 8/31/13
CONT. SHORELINE INSPECTION FOR
SOUTH OF RUNWAY 18-36

TIME	VIEW	COMMENT
0905	E	Boom #6 OVERVIEW
0906	W	
0909	N	SEEP AT WEST END
—	—	RECOVERY TRENCH
0911	W	
0911	W	DEBRIS ON SHORE
0912	N	
0913	N	
0914	E	SEEP
0915	N	
0916	E	SEEP
0917	W	SHEEN
0917	W	
0918	E	SEEP
0919	E	Down-stream Bridge SEEP & DEBRIS
0919	N	
0920	N	
0920	E	Bridge upstream SEEP
0921	N	
0921	E	SEEP
0922	N	
0923	N	

8/31/13

TO 66 ADAK LTM 2013 8/31/13
CONT. SOUTH OF RUNWAY 18-36

TIME	VIEW	COMMENT
0923	N	
~~0923~~	~~N~~	BA 8/31/13
0924	N	
0925	N	
0925	N	
0926	N	
0927	N	
0929	N	
0932	N	
0933	N	DEBRIS
0935	N	
0936	N	DIKE PUMPS
0936	N	
0938	N	
0939	N	
0940	N	

PHOTO LOG FOR WELLS

WELL	DIRECTION	TIME
02-300	EAST	1042
02-478	NORTH	1114
02-479	SOUTH	1143
02-815	EAST	1132
02-816	SOUTH	1102

8/31/13

TO66 ADAK LTM 2013 8-31-13
CONT. PHOTO LOG FOR WELLS

WELL	DIRECTION	TIME
NMCB-11	SOUTH	1051
NMCB-09	SOUTH	1032
NMCB-12	EAST	1122

1730 - END OF DAY

8-31-13

T066 ADAK LTM 2013 9/1/13

1100 - LOAD UP REPACK CONTAINER 1 of 1 for team 3 to be SHIPPED OUT TO LAB TODAY.

1400 - John Highston TOOK coolers TO AIRPORT FOR LAB ANALYSIS

9/1/13

T066 ADAK LTM 2013 9/2/13

0700 - IN THE OFFICE FOR BRIEF

0727 - TAILGATE SAFETY MEETING HELD BY SSITO JOHN HOLMSTONE AND LOGGED IN HEALTH AND SAFEY LOG BOOK. MODIFIED LEVEL D. WX SHOWERS OFF AND ON THROUGHOUT THE DAY AND HIGH OF 52°F.

HORIBA CALIBRATION

TIME	PH	COND	TURB	DO	TEMP	SAL	ORP
0800	3.99	4.48	0.3	7.07	12.69	0.2	248
NA							

PID BUMP TEST: 112

0831 - ON SITE AT NMCB SAMPLE ID NL-OSS-2013 FOR SEDIMENT SAMPLING. LOW TIDE IS AT 0930 SITE FOUND USING 2012 PHOTO WE POSITIVELY IDENTIFIED THE SEDIMENT LOCATION. THE LOCATION IS ~10' FROM THE STAKE ON THE TOP OF THE MOUND THE LOCATION IS UP FROM THE "TANNING ROCK"

0955 - 50.1 SAMPLES TAKEN NL-OSS-2013

9/2/13

T066 ADAK LTM 2013 9/2/13

1001 - PHOTOS TAKEN MORE PHOTOS WILL BE TAKEN AT THIS LOCATION WHEN THE AREA DRIES OFF AND IS RELABELED

1035 - BACK TO OFFICE FOR DEMOB AND PACKING UP SOIL SAMPLES FOR THE LAB ANALYSIS.

PHOTO LOG

WELL	DIRECTION	TIME
NL-055	FIELD WORK	0944
NL-055	FIELD WORK	0945
NL-055	NORTH	1002
NL-055	NORTH / DOWN	1001
NL-055	NORTH / DOWN	1002

1200 - END OF DAY

John Aylsh 9-2-13

T066 ADAK LTM 2013 9/3/13

0700 - MORNING OFFICE BRIEF.

0710 - TAILGATE MEETING HELD - SSHO - JOHN Highstone - AND LOGGED IN HEALTH AND SAFETY BOOK. PPE MODIFIED LEVEL D. WX 37°F WITH 14-26 MPH WEST WIND AND HIGH OF 53°F.

0720 - REVIEW PRODUCT RECOVERY APP / SSHP.

1440 - ON SITE AT TANKER SHED. TO CONDUCT WELL INSPECTIONS

1445 - TS-03 WELL INSPECTION PERFORMED. HAZARD AND PHYSICAL SURVEY - REBAR AND CEMENT PILE W/ METAL DEBRIS BY THE SITE. [DTW 6.62'] TRACE PRODUCT [DTB 12.73'] PID 0.4 ppm AT WELL HEAD AND BREATHING ZONE.

1452 - PHOTO TAKEN FOR PHOTO LOG NOTE: BORROWED TEAM 2 PID BUMP TESTED AT 0745 AT 101 ppm

1455 - ON SITE AT WELL 04-313 PID AT WELLHEAD 0.0 ppm

9/5/13

T066 ADAK LTM 2013 9/3/13
CONT.

PID IN BREATHING ZONE 0.0 PPM
CONDUCTED WELL INSPECTION
AND HAZARD AND PHYSICAL SURVER
THERE IS A FIRE EXTINGUISHER
CRUSHED AND LARGE TIRE AND
WOOD DEBRIS AT THE LOCATION
[DTW 6.85'] TRACE PRODUCT
[DTB 13.25'] HARD BOTTOM
1507 - PHOTO TAKEN FOR PHOTO LOG
1509 - ON SITE AT 04-312 TO
CONDUCT WELL INSPECTION
AND SITE HAZARD AND PHYSICAL
SURVEY INSPECTION - NO HAZARD
IN DIRECT AREA OF THE WELL
LOCATION. PID AT WELLHEAD
2.9 PPM AND PID 0.0 PPM IN
breathing zone.
[DTW 6.81'] ~~[DTW 12.90']~~ 9/12/13 Trace product
[DTB - 12.90'] HARD BOTTOM
1516 - PHOTO TAKEN FOR PHOTO LOG
1521 - ON SITE 04-301 well FOR
WELL INSPECTION AND HAZARD
AND physical survey inspection.
PID AT wellhead 1.5 PPM
9/3/13

T066 ADAK LTM 2013 9/3/13
PID AT BREATHING ZONE 0.0 PPM
THERE ARE SMALL METAL DEBRIS
HAZARDS AND SOME PLASTIC DEBRIS
[DTW 6.94'] TRACE PRODUCT
[DTB 13.29'] HARD BOTTOM
1529 - PHOTO TAKEN FOR PHOTO LOG
1529 - ON SITE AT WELL 04-302 TO
CONDUCT WELL INSPECTION PID
1.1 PPM AT WELLHEAD AND 0.0 PPM
at breathing zone. HAZARD AND
PHYSICAL SURVEY OF THE AREA -
SMALL PIECES OF GLASS AND METAL
DEBRIS INCLUDING NAILS.
[DTW 6.70'] TRACE PRODUCT
[DTB 13.25'] SOFT BOTTOM
1537 - PHOTO TAKEN FOR PHOTO LOG
1544 - LEAVING TANKER SHIP SITE
1604 - ARRIVE BACK AT OFFICE FOR
DEMOB, PAPERWORK AND
PHOTO LOG.
1900 - END OF DAY

9-3-13

T066 ADAK LTM 2013 9-3-13

CONTINUED FROM PAGE 47 FOR THE DAY.

PHOTO LOG

WELL	DIRECTION	TIME
04-301	NORTH	1528
04-302	NORTH	1536
04-312	NORTH	1516
04-313	EAST	1507
TS-03	WEST	1452

1900 - END OF DAY

9-3-13

T066 ADAK LTM 2013 9/4/13

0700 - MORNING BRIEF HELD

0718 - SAFTEY BRIEF HELD BY J. Highstone SSHO AND LOGGED IN HEALTH AND SAFTEY LOG BOOK.

WX - Cloudy, SHOWERS, 11 mph Gust, 54°F

PPE - MODIFIED LEVEL D

HORIBA CALIBRATION

TIME	PH	COND	TURB	DO	TEMP	SAL	ORP
0757	7.99	4.49	0.2	7.17	13.37	0.2	247
NA							
NA							

0804 - PID BUMP TEST 137 ppm

1010 - NMCB SHORELINE ON SITE INSPECTION CONDUCTED. Completed checklist

1105 - OFF SITE SHORELINE NMCB

1106 - BACK TO OFFICE FOR MOB

NMCB PHOTO LOG

TIME	VIEW	COMMENT
1015	E	START
1016	NE	
1017	NE	
1019	NE	
1020	E	Rusted Culvert
1022	E	Wood DEBRIS

9/4/13

TO66 ADAK LTM 2013 9/4/13
Cont.

TIME	VIEW	COMMENT
1023	E	
1025	E	
1034	NE	Rusted Culvert
1036	E	OLD PIER
1038	E	OLD PIER
1040	E	
1041	E	
1043	S	
1045	S	SEAL
1048	N	
1050	NE	END
1051	W	OVERVIEW

9/4/13

TO66 ADAK LTM 2013 9/5/13

0700 - Brief and lessons learned
0710 - Safetty brief tailgate meeting held by J. Hykstone SSHO. PPE MODIFIED LEVEL D. SAFETY AND HEALTH LOGGED IN HEALTH AND SAFETY LOG BOOK. WX - MOSTLY SUNNY 52° WITH 15 MPH wind and AFTERNOON RAIN.

HORIBA CALIBRATION

TIME	pH	COND	TURB	DO	TEMP	SAL	ORP
0744	3.97	4.55	0.0	5.92	9.31	0.2	262
1130	3.98	4.53	0.0	8.45	11.21	0.2	195

0753 - PID BUMP TEST 107 PPM USING BACK UP PID HOUPE PLUS - 2000EX #111981.
0935 - AT OFFICE DEROB AND COLLECT DATA
0949 - ON SITE GCI compound FOR WATER SAMPLING AT OU-100. PID AT WELLHEAD AND BREATHING IS 0.0 PPM. ALSO COLLECTING DUP FOR THIS SITE. [DTW 28.32']
1049 - Collect Parameters
1104 - Parameters stabilized Purged 1.5 gal, pH 6.26, Cond 0.615 mS/cm

9/5/13

T066 ADAK LTM 2013 9/5/13
CONT.

TURB 28.4 NTU, DO 0.00, TEMP 7.25°C
Sal 0.0 %, ORP -96mV

1106 - BEGIN Collecting Samples
04-100-2013 AND ~~DUP 04-100~~ BS 9/5/13
04-110-2013 DUP FOR
BOTH SAMPLES Collected
• (3) 40 ml VOC w/HCl GRO (AK101)

1115 - OFFSITE AND LEAVING TO
OFFICE FOR DEMOB AND
SHIPPING SAMPLES.

1130 - Collected HORIBA CALIBRATIONS
AND CHANGED OUT AUTO CAL.
SOLUTIONS.

1306 - Coolers of Samples taken
to the air port

~~1400~~ 9/5/13

1400 - SAMPLES TAKEN TO AIRPORT
BACK TO OFFICE FOR QC WORK

1900 - END OF DAY

9/5/13

T066 ADAK LTM 2013 9/6/13

0700 - MORNING BRIEF

0727 - SAFETY MEETING HELD
BY JOHN HIGHSTONE SSHO
LOGGED IN THE HEALTH AND
SAFETY LOGBOOK. WX PARTLY
Cloudy, 9-18 mph winds, 51°F

0810 - PID BUMP TEST: 105 PPM

0853 - ON SITE SP4-3 TO COMPAIR METHODS
TEAM 2 [DTW - 20.37'] SITE SA 80
TEAM 3 [DTW - 20.36'] SITE SA 80

0901 - ON SITE 04-155 CHECK BOTTOM
DTP 16.21', [DTW 16.48']
DTB 24.68' AT N 20' THERE
WAS A RIDGE FEEL AND METER
CAUGHT A LITTLE, SOCK IN WELL

0910 - AT 04-155. SINGLE PRODUCT THICKNESS
0.27'

0913 - AT 04-158 DTB 26.33
SOFT BOTTOM

0933 - ON SITE NL-05 FOR
RE MARKING LOCATION OF
SEDIMENT SAMPLING WITH
YELLOW MARKING PAINT.

0937 - PHOTO'S TAKEN FOR PHOTO LOG

9/6/13

TO 66 ADAK LTM 2013 9/6/13

1030 - BACK TO DFFILW TO RELOAD VEHILLE FOR SAMPLING SWMU 61

HORIBA CALIBRATION

TIME	PH	COND	TURB	DO	TEMP	Sal	ORP
1058	3.99	4.52	0.0	8.25	9.98	0.2	237
1744	3.99	4.54	0.1	8.25	8.18	0.2	227
N/A							

1221 - ONSITE AT SWMU 61 [DTW 3.39'] Collect water Samples AND CONDUCT WATER SAMPLE LOG

1256 - BEGIN collecting sample stabilizing parameters 14-113

1326 - SINCE THE WELL IS slow RECHARGE WE COLLECTED SAMPLES BEFORE STABILIZED.

1328 - Collected samples purged 0.92 gal 9/6/13 0.750 gal, pH 6.53, Cond 0.999 mS/cm Turb 8.8 NTU, DO 0.00 mg/L Temp 9.93°C Sal 0.0%, ORP -119.

- (3) 40ml w/HCL BTEX (8260C)
- (3) 40ml w/HCL GRO (AK101)
- (2) 1L AMBER PAHs (17) (8270D SIM)

Collect SAMPLES 14-113-2013

SLOW LOW FLOW TO LET WELL

— John Aigler 9-6-13 —

TO 66 ADAK LTM 2013 9/6/13

CONT.

RECHARGE. THIS WATER COLLECTED WHILE STABILIZING PARAMETERS SMELLED HEAVY OF PETROLEUM.

1341 - ON SITE SWMU 61 14-210 [DTW - 2.76'] SET UP TO COLLECT PARAMETERS USING LOW FLOW PERISTALTIC PUMP.

1440 - DONE AT 14-113 collecting water samples. [DTB 6.33']

1441 - PHOTO TAKEN FOR PHOTO LOG

1443 - SET UP TO COLLECT PARAMETERS

1500 - BEGIN COLLECTING PARAMETERS THE WELL IS GOING LOW and VERY SLOW TO RECHARGE.

1550 - WE HAVE STOPPED TO RECHARGE THE WELL AND CAN ONLY GET AT MAXIMUM TWO READINGS BEFORE WE HAVE TO LET THE WELL RECHARGE. EACH TIME WE STOP THE DO AND TURB ARE OUTSIDE PARAMETERS

1655 - THE WELL WAS PUMPED DRY TWICE AND THE DECISION WAS MADE TO LET THE WELL RECOVER OVERNIGHT.

9/6/13

T066 ADAK LTM 2013 9/6/13

1705 - PHOTO TAKEN FOR LOG BOOK

1712 - BACK TO OFFICE TO DEMOB AND PACK SAMPLES AND PAPERWORK

PHOTO LOG:

WELL	DIRECTION	TIME
14-113	EAST	1440
14-210	WEST	1705
NL05	NORTH	0937
NL05	NORTH	0937

1900 - END OF DAY

9-6-13

T066 ADAK LTM 2013 9/7/13

0700 - AT THE OFFICE FOR MORNING BRIEF.

0729 - SAFETY BRIEF TAILGATE MEETING HELD AND LOGGED IN HEALTH AND SAFETY LOGBOOK SSHO J. HIGHSTONE. WX 23-34 mph winds AND RAIN.

HORIBA CALIBRATION

TIME	pH	COND	TURB	DO	TEMP	SAL	ORP
0831	3.95	4.50	0.0	7.86	12.23	0.2	256
1154	3.96	4.51	0.2	7.41	11.46	0.2	244
NA							

0837 - PID BUMP TEST: 105 ppm

0855 - AT PARKING LOT TO SWMU 61

0901 - ON SITE SWMU 61 ~~14~~-210 TO COLLECT (1) PARAMETER TREND TO SAMPLE. THIS WELL IS SLOW RECOVERY WELL. [DTW 2.84']

0917 - TOOK PARAMETER READINGS PURGED AMOUNT IN FLOW CELL pH 6.09, COND 0.738 mS/cm, TURB 8.4 NTU DO 4.41 mg/L, TEMP 9.54 °C, ORP -55 mV

0919 - SAMPLE TAKEN USING PERISTALTIC PUMP, LOW FLOW RATE

9/7/13

T066 ADAK LTM 2013 9/07/13
CONT. SAMPLE ~~04~~ 14-210-2013
(3) 40ml w HCL GRO (AK 101)
(3) 40 m w/HCL BTEX (8260C)
[DTB 7.22']
0927 - PHOTO TAKEN FOR SHORELINE INSPECTION OF SITE.
0954 - OFF SITE SWMU 61, TEAM 1 HAS SAMPLES
1000 - AT BUNKER TO DUMP PURGE WATER FROM 303 AND SWMU 61 AREAS. N/SOIL.
1028 - AT OFFICE TO CHANGE TRUCKS
1151 - AT OFFICE FOR DEMOB

PHOTO LOG FOR DAY

WELL	DIRECTION	TIME
SWMU61 SHORELINE	NORTH	0933
SWMU61 SHORELINE	SOUTH	0933

13-00 END OF DAY

9-7-13

T066 ADAK LTM 2013 9/8/13
-1130 AT OFFICE TO PACK SAMPLES FOR SHIPPING OFF ISLAND
RELABEL: FOR MS/MSD BTEX VOC
• (4) 40 ml w/ HCL BTEX (8260C)
• (2) 40 ml w/HCL GRO (AK 101)
FOR SAMPLES 14-210-2013
1300 - SAMPLES TAKEN TO AIRPORT

9/8/13

TO 66 ADAK LTM 2013 9/9/13

0700 - MORNING MEETING HELD

0728 - SAFETY TAILGATE HELD SSHO J. Highstone AND LOGGED IN HEALTH AND SAFETY LOG BOOK. WX 52°F 15MPH WINDS AND SUNNY

HORIBA CALIBRATION

TIME	PH	COND	TURB	DO	TEMP	SAL	ORP
0803	3.99	4.51	0.1	7.62	11.80	0.2	263
1347	3.99	4.52	0.6	7.86	12.22	0.2	256
1828	3.98	4.56	0.2	7.55	14.56	0.2	246

0805 - PID BUMP TEST - 107

0811 - 4 GAS BUMP TEST

CO 48

H2S 14

OXY 17.7

LEL 54

1030 - ON SITE AT SWMU 25, ROBERTS LANDF. 11 TO SET UP USING LOW FLOW PERISTALTIC PUMP. [DTW 6.46'] PID 0.0 PPM casing/breathing

1104 - Collect Parameters 4 GAS METER CO - 0, H_2S - 0, Oxy 20.9, LEL 0.0

WELL INSPECTION CHECKLIST AND Hazard and PHYSICAL SURVEY Conducted

THE AREA IS CLEAR OF DEBRIS

9/9/13

TO66 ADAK LTM 2013 9/9/13

CONT. SITE LOCATION A-2

HOLES IN GRASS HAZARDS OBSERVED.

FLOW RATE IS AT 0.5 gal EVERY 5 MIN. FOR PERISTALTIC PUMPING.

1134 - PARAMETERS STABILIZED - purged 3 gal

1136 - Collect SAMPLES A-2-2013

- (1) 500ml poly w HNO3 DISSOLVED METAL PP+AL 6020A/7470A filtered
- (1) 500 ml poly w/HNO3 TOTAL METALS+AL 6020A/7470A
- (5) 40 ml VOC (30) 8260C ~~OB 3124113~~ 9/11/13
- (1) 500 ml UP Alkalinity SM 2320B, Sulfate (300.0) TDS (SM 2540C)
- (1) 500 ml poly w H_2SO_4 COD (SM5220C) TKN (ASTM DE1426-93B) AMMONIA (SM 4500G)

1146 - Collect SAMPLE DUP A-12-2013

- (1) 500 ml poly w/HNO3 DISSOLVED PP+AL 6020A/7470A
- (1) 500 ml poly w HNO3 TOTAL ~~METAL~~ PP METALS + AL 6020A/7470A 9/11/13
- (5) 40 ml VOC (30) 8260C ~~OB 3124113~~

DTB 52.90'

1211 - PHOTO TAKEN FOR PHOTO LOG

1230 - SAMPLES PACKED AND TAKEN TO OFFICE

9/9/13

TQ66 ADAK LTM 2013 9/9/13

1419 - ON SITE A SWMU 25 Roberts landfill B-1 TO SAMPLE USING THE PERISTALTIC PUMP LOW FLOW. PID 0.0 ppm at wellhead and breathing zone [DTW 11.35']

1453 - START COLLECTING STABILIZATION PARAMETERS. 400 ml/min at 0.5 gal every 5 min.
4/ gas meter reading CO - 0.0, N_2S - 0.0, O_2 - 20.8 LEL - 0.0
Conducted well inspection Checklist and Hazard and physical survey inspection of well area. No debris at the site.

1523 - PARAMETERS STABILIZED purged 3 gal, pH 4.27, COND 0.458 mS/cm, TURB 31.1 NTU DO 0.0 mg/L, TEMP 6.81 °C Sal 0.0 %, ORP 280 mV

1525 - Sample Collected B-1-2013 + MS/MSD

9-9-13

TQ66 ADAK LTM 2013 9/9/13

LATE ENTRY PARAMETERS A-2
pH 6.42, Cond 0.847 mS/cm, Turb 6.3 NTU
DO 0.0 mg/L, Temp 6.04, Sal 0.0%
ORP -37 mV

- (15) 40 ml w/HCL VOC (30) 8260C BS 9/11/13 ~~BS 9/12/13~~
- (3) 500 ml poly w/ HNO_3 Dissolved METALS PP + AL (6020A / 7470A) Filtered
- (3) 500 ml poly w/ HNO_3 TOTAL METALS PP + AL (6020A / 7470A)
- (1) 500 ml poly w/ Alkalinity (SM2320B) Sulfate (300.0) TDS (SM2540C)
- (1) 500 ml poly w/ H_2SO_4 COD (SM5220C) TKN (ASTM D1426-93B) Ammonia (SM 5400G)

[DTB 31.65']

1605 - PHOTO TAKEN FOR PHOTO LOG

1416 - AT PARKING SPOT TO SWMU 25 Roberts Landfill A-5 FOR WATER SAMPLING USING LOW FLOW PERISTALTIC PUMP

1636 - AT WELL A-5 PID 0.0 AT WELL NO ORGANIC [DTW 25.57'] DTP 25.56' BIO-Fouling on the probe does not smell like product. CO 0.0, N_2S 0.0, O_2 20.9, LEL 0

1701 - BEGIN Collecting Parameters

9/9/13

T066 ADAK LTM 2013 9/4/13

1726 - PARAMETERS STABILIZED: purged 25 pH 5.61, Cond 0.582 mS/cm, Turb 60.3 NTU DO 0.0 mg/L, TEMP 6.82, Sal 0.0 % ORP 92 mV

1730 - BEGIN COLLECTING SAMPLES FOR A-5-2013

- (5) 40 ml w/ HCL VOC (30) ~~OR SIGNING~~ BS 9/4/13
- (1) 500 ml w/ HNO3 Dissolved PP METALS + AL 6020A/7470A Filter
- (1) 500 ml w/ HNO3 TOTAL PP METALS + AL 6020A/7470A
- (1) 500 ml up poly Alkalinity (SM2320B) Sulfate (300.0), TDS (SM2540C)
- (1) 500 ml poly w/ H2SO4 COD (SM5220C)
- TKN (ASTM D1426-93B) AMMONIA (SM4500G)

1752 - DTB 32.75' sp. 1 GPM N. Sgal water at well

1752 - PHOTO TAKEN FOR PHOTO LOG

1817 - BACK AT OFFICE FOR DEMOB

PHOTO LOG

WELL	DIRECTION	TIME
A-2	WEST	1210
A-5	NORTH	1752
B-1	EAST	1605

1900 - END OF DAY

— [signature] 9-9-13 —

T066 ADAK LTM 2013 9/10/13

0700 - MORNING BRIEF AT THE OFFICE.

0717 - MORNING TAILGATE MEETING HELD BY J. HUGHSTONE AND LOGGED IN HEALTH AND SAFETY LOG BOOK. WX CLOUDY WITH WIND 12-20 MPH HIGH OF 52°F

HORIBA CALIBRATION

TIME	pH	COND	TURB	DO	TEMP	SAL	ORP
0744	4.0	4.51	0.3	7.53	13.09	0.2	267
1636	3.99	4.50	0.0	7.46	12.97	0.2	263
N/A							→

0747 - PID BUMPTEST 107 ppm
4 GAS METER BUMP TEST
CO - 47
N_2S - 14.4
OXY - 17.8
LEL - 54

0830 - ONSITE SWMU 25 Roberts Landfill A-3 PID 0.0 ppm
4 GAS CO - 0.0, N_2S 0.0, OXY - 20.9, LEL 0.0.
[DTW 28.49']

0840 - SET UP TO SAMPLE USING LOW FLOW PERISTALTIC PUMP. Completed Well INSPECTION Checklist and

[signature] 9/10/13

T066 ADAK LTM 2013 9/10/13
CONT.

Hazard and Physical Survey of the area. There are metal pipes AND wood debris around the well area and the roadway out to the well has been washed OUT AND ROUGH TO DRIVE ON.

0904 - BEGIN COLLECTING STABILIZATION PARAMETERS. 100 ml/min 1/8 gal flow rate.

0939 - PARAMETERS STABILIZED

0942 - COLLECT SAMPLES A-3-2013
- (3) 40 ml VOC (30) 8260C 08412413
purged 0.875 gal, pH 4.57, Cond. 0.302 mS/cm, Turb 24.9 NTU, DO 3.92 mg/L, Temp 8.84°C, Sal 0.0, 367 mV ORP.

COLLECTED SAMPLES A-3-2013
- (1) 500 ml poly w/ HNO_3 TOTAL PP METALS + AL (6020A/7470A)
- (1) 500 ml poly w/ HNO_3 DISSOLVED PP METALS + AL (6020A/7470A)

1019 - This well is slow recovery AND Last two bottles WE will collect IN THE AFTERNOON - OFF SITE

TR 9/10/13

T066 ADAK LTM 2013 9/10/13

1050 - ON SITE SWMU 62 FOR SHORELINE INSPECTION CONDUCTED. SEEP LOCATED AND LOGGED ON SHORELINE INSPECTION CHECKLIST. PHOTOS TAKEN FOR PHOTO LOG.

1154 - Completed shoreline inspection of SWMU 62. Photo

1357 - BACK ONSITE AT SWMU 625 Roberts landfill A-3 TO

1358 - COLLECT THE REST OF THE SAMPLES. A-3-2013
- (1) 500 ml poly w/ H_2SO_4 COD (SM5220C) TKN (ASTM D1426-93B) AMMONIA (SM4500G)
- (1) 500 ml poly UP Alkalinity (SM 2320B) Sulfate (300.0) TDS (SM 2540C)

1439 - [DTB 32.98'] HARD BOTTOM

1442 - PHOTO TAKEN FOR PHOTO LOG. & OVERVIEW SHOTS TAKEN FOR Photo ROBERTS LANDFILL A-3 & A-~~4~~5

1452 - OVERVIEW SHOTS TAKEN OF ~~A~~ B-1. Photo

1502 - COLLECTING DTW WELL INSPECTION SHEETS FROM TEAM 2.

1523 - CONDUCT WELL INSPECTION AT MW-187-1

TR 9/10/13

T066 ADAK LTM 2013 9/10/13

CONT. PID 0.0 ppm wellhead/breathing
[DTW 22.31']

1534 - PHOTO TAKEN FOR PHOTO LOG

1542 - ON SITE MW-134-11 Conduct well inspection
PID 0.0 AT WELLHEAD / BREATHING
[DTW 18.49']

1545 - PHOTO TAKEN FOR PHOTO LOG

1608 - ON SITE 03-619 TO CONDUCT WELL
INSPECTION. PID 0.0 BREATHING
1.2 ppm AT WELL HEAD
[DTW 16.65']

1610 - PHOTO TAKEN FOR PHOTO LOG

1613 - ON SITE 03-155 TO CONDUCT
WELL INSPECTION PID 0.0 AT
WELLHEAD AND BREATHING ZONE
[DTW 19.31']

1615 - PHOTO TAKEN FOR LOG BOOK

1620 - BACK TO OFFICE FOR DEMOB

SHORELINE PHOTOS FOR
SWMU 62 EAGLE BAY

TIME	VIEW	COMMENT
1115	S	OVERVIEW START
1117	S	
1118	W	Sheen 50' N Boom 8
1119	S	Boom #8

9/10/13

T066 ADAK LTM 2013 9/10/13

TIME	VIEW	COMMENT
1120	W	Sheen boom #8
1123	W	Sheen boom #8
1125	W	Pooled Product
1126	S	
1127	S	
1129	S	
1131	S	
1133	S	
1136	S	
1137	S	
1138	S	END

SWMU 25 ROBERTS LANDFILL PHOTOS

TIME	VIEW	COMMENTS
1420	S	A-5 OVERVIEW
1421	S	A-5 OVERVIEW
1422	W	A-5 OVERVIEW
1422	N	A-5 OVERVIEW
1442	E	A-3
1442	E	A-3 OVERVIEW
1451	E	B-1 OVERVIEW

SWMU 62 Sandy COVE PHOTOS

TIME	VIEW	COMMENTS
1534	S	MW-187-1
1544	N	MW-134-11

9/10/13

T066 ADAK LTM 2013 9/10/13

TIME	VIEW	COMMENT
1611	N	03-619
1617	E	03-155
1618	S	03-155 OVERVIEW

1900 - END OF DAY

9/10/13

T066 ADAK LTM 2013 9/11/13

0800 - MORNING MEETING AT THE OFFICE

0826 - MORNING SAFETY MEETING TAILGATE HELD BY JOHN HOLSTONE AND LOGGED IN HEALTH AND SAFETY LOG BOOK. WX 52°F WITH HEAVY WIND 42 MPH GUST AND WINDCHILL 40°F PPE - MODIFIED LEVEL D

HORIBA CALIBRATION

TIME	PH	COND	TURB	DO	TEMP	SAL	ORP
0916	4.00	4.49	0.0	7.36	12.55	0.2	268
1334	3.95	4.53	0.0	7.02	11.85	0.2	239
N/A							

0920 - PID BUMP TEST 106 ppm

0928 - ON SITE AT MW-187-1 SWMU62 FOR WATER SAMPLING USING PERISTALTIC PUMP LOW FLOW

0934 - PID IN BREATHING ZONE AND WELL-HEAD 0.0 PPM [DTW 19.48']

0953 - SET UP TO COLLECT PARAMETERS
- BEGIN COLLECTING PARAMETERS

1000 - COLLECTING PARAMETERS 400ml/min NON BIO OR PETROLEUM SMELL BUT THERE IS A CHEMICAL ODOR IN PURGE BUCKET

1014 - PARAMETERS NOT STABILIZED

9/11/13

TO66 ADAK LTM 2013 9/11/13
CONT.

1015 - REACHED >3X CASING VOLUME & PURGE 1.5 gal
1017 - PH 6.07, Cond 0.870 mS/cm, Turb 43.7 NTU, DO 0.0 mg/L, TEMP 6.61°C SAL 0.0% ORP -53 mV
1017 - COLLECT SAMPLES MW-187-1-2013 (2) 1L AMBER w/ HCL DROCAK 102 [DTB 22.35]
1040 - OFF SITE MW-187-1
1043 - ONSITE 03-155 SWMU 62 Sandy Cove TO COLLECT WATER SAMPLES USING LOW FLOW PERISTALTIC PUMP
1051 - PID 0.0 ppm AT WELLHEAD/BREATHING ZONE [DTW 19.32'] SET UP TO COLLECT SAMPLING PARAMETERS.
1108 - BEGIN COLLECTING PARAMETERS Flow-rate 400 ml/min
1128 - PARAMETERS STABILIZED NO PURGED 2.0 gal OVER 3X CASING VOLUME OF 1.704 gal
1130 - BEGIN COLLECTING SAMPLES 03-155-2013 pH 5.99, Cond 0.505 mS/cm, Turb 40.6 NTU DO 0.00 mg/L, TEMP 6.60°C, Sal 0.0% REDOX -14 mV. [DTB 25.01']

9/11/13

TO 66 ADAK LTM 2013 9/11/13

1144 - OFF SITE 03-155 SWMU 62
1341 - AT BUNKER TO DROP OF CERCLA PURGE WATER ~15 GALLONS AND CLEAN UP BUNKER/RECYCLE GLASS
1417 - BACK TO OFFICE FOR DEMOB. AND COMPLETE PAPERWORK
1900 - END OF DAY

9/11/13

TO 66 ADAK CTM 2013 9/12/13

0900 - MEETING HELD AT OFFICE.

0949 - SAFETY BRIEF TAILGATE MEETING HELD BY JOHN HIGHSTONE SSHO AND LOGGED IN HEALTH AND SAFETY LOG BOOK.
PPE - MODIFIED LEVEL D.
WX - High 54°F WIND NW 15-34mph.

1000 - PACK UP EQUIPMENT AND QC PAPERWORK, DISPOSE OF TEST KIT WASTE INTO BUCKET FOR PURGE WATER FILTER

1700 - END OF DAY

9/12/13

TO66 ADAK CTM 2013 9/13/13

0900 - STAFF MEETING HELD

0930 - SAFETY MEETING HELD BY JOHN HIGHSTONE AND LOGGED IN THE HEALTH AND SAFETY LOG BOOK. PPE IS LEVEL D AND WX SUNNY 54°.

0940 - DEMOB AND PHOTO LOG

1026 - OVERVIEW PHOTO OF TANKER SHED.

1034 - OVERVIEW SHOT GCI PHOTO TAKEN

1036 - MW-303-41 PHOTO TAKEN

1037 - AREA 303 OVERVIEW PHOTO TAKEN

1044 - ~~TAKEN~~ 9/12/13 SWMU 60 TANK FARM A OVERVIEW PHOTO TAKEN ALSO PAINTED COLLAPSED (ING) ROADWAY WITH RED "X" W/ MARKING PAINT.

1048 - SOUTH OF RUNWAY OVERVIEW PHOTO TAKEN

1052 - NMCB OVERVIEW PHOTO

1056 - NL-05 PHOTO TAKEN. (DISTANCE)

1100 - NMCB OVERVIEW PHOTO (SE)

1105 - AREA 303 OVERVIEW BY THE SCHOOL / BALLFIELD PHOTO TAKEN

9/13/13

T066 ADAK LTM 2013 9/13/13

1105 - PHOTO TAKE MW-303-42

1105 - UNIDENTIFIED WELL W/ NO MARKINGS AT AREA 303 BY THE BAILFIELD DUGOUT. PHOTO TAKEN.

1112 - PHOTO TAKEN ARCTIC ACRES

PHOTO LOG

TIME	VIEW	COMMENT
1112	EAST	ARCTIC ACRES OVERVIEW
1036	SOUTH	AREA 303 OVERVIEW
1105	WEST	AREA 303 OVERVIEW
1034	WEST	GCI OVERVIEW
1036	SOUTH	WELL MW-303-41
1107	WEST	WELL MW-33-42
1054	NORTH	NL-05 SAMPLE LOCATION
1052	SOUTH	NMCB OVERVIEW
1059	EAST	NMCB OVERVIEW
1048	NORTH	SOUTH OF RUNWAY OVERVIEW
1049	NORTH	SOUTH OF RUNWAY OVERVIEW-2
1043	SOUTH	SWMU 60 OVERVIEW
1042	WEST	SWMU 60 OVERVIEW
1026	WEST	TANKERSHED OVERVIEW

1300 - AT BUNKER PREP FOR PURGE WATER FOR SAMPLING

1330 - AT III UNITS FOR INTERNET TROUBLESHOOTING.

1430 - END OF DAY

John A. [illegible] 9-13-13

T066 ADAK LTM 2013 9/14/13

0900 - SAFETY MEETING HELD BY JOHN HIGHSTONE. PPE LEVEL D MODIFIED AND WX 54°F SUNNY WITH POSSIBLE WIND GUSTS.

0945 - AT BUNKER TO FILTER CERCLA AND NON CERCLA PURGE WATER FOR CONTAINMENT AND ANALYSIS. pH OF NON-CERCLA PURGE WATER IS 6. FILTERED CERCLA PURGE USING PERISTALTIC PUMP INTO 55 GAL DRUM. N 12 GAL OF PURGE WATER

1028 - BEGIN FILTERING CERCLA WATER THROUGH CARBON FILTRATION INTO DRUM.

1045 - BEGIN SAMPLING IDW-CERCLA-A-2013

- (4) GRO (AK101)
- (2) DRO (AK102)
- (2) TCLP VOCs 1311/8260C
- (1) TCLP RCRA METALS 1311/6010C/7470A
- (4) VOCs (30) 8260C
- (1) TOTAL PRIMARY POLLUTANT METALS + AL 6020A & 7470A

1120 - CHANGED CARBON FILTER TO FILTER NON-CERCLA PURGE WATER

[illegible] 9/14/13

TD66 ADAK LTM 2013 9/14/13

1125 - BEGIN SAMPLING NON CERCLA
PURGE WATER IDW-PETRO-A-2013
- (4) DRO (AK101)
- (2) DRO (AK102)
- (4) BTEX ~~(AK~~ 8260C
- (1) TOTAL LEAD 6020A

1210 - LEFT BUNKER
1230 - BACK TO OFFICE FOR DEMOB
1300 - END OF DAY

9/14/13

No further entries.

11/25/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: 03-012

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/13 0853

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, light rain, 5 mph wind N

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: light smell of petroleum	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 Bollards	☒	☐

16. Previous well depth: 11.50 (URS 2013) Current well depth: 11.48 ft btoc

17. Depth to water: 7.41 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ AD F
8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: 03-012

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/13 0853

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, light rain, 5 mph wind N

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 7.41

Total Depth of Well Below Top of Casing (feet): 11.50 (URS 2013) 11.48

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4.09

Gallons per Foot: 0.16 Gallons in Well: 0.65

Three Times Casing Volume: 1.96 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 03-012-2013

Time Sample Collected: 0955

Sampling Method: grab

Remarks (Color/Odor): light smell of petroleum / clear water

Stabilized? NO 3 Casing Volumes Removed? yes

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	0927	5.59	0.081	2	5.37	12.41	0.00	266
0.5	0932	5.53	0.103	Ø	4.21	11.79	0.00	271
1.0	0937	5.46	0.107	Ø	4.05	11.50	0.00	277
1.5	0942	5.45	0.115	Ø	3.95	11.32	0.00	283
2.0	0947	5.46	0.128	Ø	3.84	11.19	0.00	288

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
4 ppm		Ø ppm		21 ppm				

Notes: PID Breathing Zone: 0.0 ppm, wellhead: 0.0 ppm

MS/MSD on GRO, Alkalinity & Sulfate, and Methane only.

ABF 8-29-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: 03-107

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/13 1545

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 60° F, 20 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" PVC		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. Moderate smell of petroleum.	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NO GUARDS	☐	☒

16. Previous well depth: 32.90' (URS 2013) Current well depth: 32.90' soft bottom

17. Depth to water: 27.61'

18. PID reading at wellhead: 679 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ 8/27/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: 03-107 / 03-117

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/13 1545

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 60°F, 20 mph wind S

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 27.61

Total Depth of Well Below Top of Casing (feet): 32.90 (URS 2013) 32.90

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.29

Gallons per Foot: 0.16 Gallons in Well: 0.85

Three Times Casing Volume: 2.54 Gallons Purged from Well:

Water Sample Data

Sample Number: 03-107-2013 Dup: ~~03-110~~ RBS 8/27/13 03-117-2013

Time Sample Collected: 1640 1645

Sampling Method: Low Flow

Remarks (Color/Odor): Moderate smell of petroleum, clear water

Stabilized? No 3 Casing Volumes Removed? yes ✓

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	1613	6.31	0.234	21	2.12	12.90	0.00	-84
.5	1617	6.30	0.220	11	1.35	12.50	0.00	-26
1.0	1621	6.29	0.214	10	0.95	11.94	0.00	-21
1.5	1625	6.28	0.210	8	0.90	11.92	0.00	-13
2.0	1629	6.25	0.210	8	0.81	11.89	0.00	-6
2.5	1633	6.24	0.210	8	0.75	11.75	0.00	-1
3.0	1637	6.22	0.209	5	0.66	11.71	0.00	-5

TEST KIT RESULTS

DO (ppm)	Dup DO	Fe^{2+} (ppm)	Dup Fe^{2+}	CO_2 (ppm)	Dup CO_2			
0.15 ppm	0.15 ppm	25 ppm	25 ppm	13 ppm	13 ppm			

Notes: PID Breathing Zone: 0.0 ppm, Wellhead: 679 ppm

Fe^{2+} dilution factor 10.

RPD = Ø for all test kits

ASF 10-28-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: 04 - 211

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/29/13 1101

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 20 30 mph Overcast 57°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: 3 bolts 9/16"		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 1 ballard	☒	☐

16. Previous well depth: 30.26. Current well depth: 30.15'.

17. Depth to water: 24.08' TC

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Moderate stale odor

Scr. screen 24.08' - 30.26'

Intake $\frac{24.08' + 30.26'}{2} = 27.17'$

✓ ABF 8-29-31

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: 04-211

Inspector(s): E. Roelofs D. Balmer Date/Time: 8/28/2013 1150

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 10-20 mph wind N 50°F overcast

Well Data

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 24.08'

Total Depth of Well Below Top of Casing (feet): 30.15' 30.26' (1055) FOR ABANDONMENT 8-29-31

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6'

Gallons per Foot: 0.16 Gallons in Well: 0.96

Three Times Casing Volume: 2.88 Gallons Purged from Well: 1.33 gal.

Water Sample Data

Sample Number: ~~MW~~ ER 8/20/13 04-211-2013

Time Sample Collected: 1150

Sampling Method: low flow peristaltic

Remarks (Color/Odor): moderate, stale

Stabilized? yes 3 Casing Volumes Removed? N/A

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1126	5.97	0.332	0.7	0.18	8.58	0.02	-44
0.333	1130	6.05	0.322	0.2	0.00	8.20	0.02	-49
0.666	1134	6.07	0.316	0.0	0.0	8.00	0.01	-54
0.999	1138	6.07	0.311	0.0	0.0	7.92	0.01	-58
1.333	1142	6.07	0.312	0.2	0.0	7.80	0.01	-61

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
0.5		30		50				

Notes: 1 to 10 Dilution for Fe^{2+}

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

8-29-31

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: MW-303-28

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/13 1510

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 61°F. 20 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N.A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Heavy Smell of petroleum	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.07 in.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type:	☐	☒

16. Previous well depth: 33.98 (URS 2013). Current well depth: 33.93'.

17. Depth to water: 28.54'

18. PID reading at wellhead: 75 ppm Breathing Zone: 0.1-0.4 ppm

Additional notes: ~~No product~~ (47) No sample collected due to product in well (0.07').

✓ AF
8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-28

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/13 1510

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 61°F, 20 mph wind S

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 28.54

Total Depth of Well Below Top of Casing (feet): 33.98 (URS 2013) 33.93

Purge Method: N/A

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.44

Gallons per Foot: 0.16 Gallons in Well: 0.87

Three Times Casing Volume: 2.61 N/A Gallons Purged from Well: N/A

Water Sample Data

Sample Number: MW-303-28-2013

Time Sample Collected: No sample collected due to product in well

Sampling Method: N/A

Remarks (Color/Odor): Heavy smell of petroleum

Stabilized? N/A 3 Casing Volumes Removed? N/A

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: DTP = 28.47'

No sample collected due to 0.07" of product in well

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

AJF 8-28-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: AREA 303 Well No.: MW-303-30

Inspector(s): J. Highstone B. Schlegger Date/Time: 8/28/13 1000

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F Overcast Light Mist

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" PVC		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: PETROLEUM ODOR MILD	☑	☐
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness 0.01'.		
14. Is the well depth consistent with past depth measurements? NC	☑	
15. Are there well protections? Type:	☐	☑

16. Previous well depth: 32.5' (UPS LOG OF BORING 6/23/06). Current well depth: 34.97'.

17. Depth to water: 27.59'

18. PID reading at wellhead: 0.6 ppm Breathing Zone: 0.0 ppm

Additional notes:

[DTP 27.58'] [DTB 34.97]

TO52 PHOTO TAKEN FOR PHOTO LOG (8/30/13)

8/30/13

8/30/13

8/30/13

8/30/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-30

Inspector(s): J. HIGHSTONE, B. SCHLEIGER Date/Time: 8-30-13 | 0842

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, WIND 10 MPH, 55°

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 27.62'

Total Depth of Well Below Top of Casing (feet): 32.5' (WRS LOG OF BORING 6/23/06)

Purge Method: LOW FLOW PERISTALTIC PUMP

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4.88'

Gallons per Foot: 0.16 Gallons in Well: 0.7808

Three Times Casing Volume: 2.34 Gallons Purged from Well: 2.333 + 0.25 = 2.583 gal purged SW

Water Sample Data

Sample Number: MW-303-30-2013

Time Sample Collected: 1010

Sampling Method: LOW FLOW PERISTALTIC PUMP

Remarks (Color/Odor): CLEAR | LIGHT PETRO ODOR

Stabilized? NO 3 Casing Volumes Removed? YES

PURGED 0.25 GAL PRIOR TO INITIAL READING

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	0940	5.99	0.518	18.5	0.00	7.50	0.0	-74
0.333	0944	6.02	0.520	21.8	0.00	7.82	0.0	-77
0.666	0948	6.04	0.519	25.3	0.00	8.06	0.0	-80
0.999	0952	6.09	0.495	29.1	0.00	7.97	0.0	-85
1.333	0956	6.11	0.496	33.3	0.00	7.95	0.0	-87
1.666	1000	6.11	0.506	40.2	0.00	7.95	0.0	-86
1.999	1004	6.13	0.498	39.4	0.00	8.19	0.0	-88
2.333	1008	6.14	0.495	49.9	0.00	8.05	0.0	-89

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
0.05ppm		20ppm		150ppm				

Notes: PID: 0.8 AT WELLHEAD, 0.0 BREATHING ZONE

Dilution of IRON TEST OF 10X

VOLUME OF WATER IN THE WELL WAS LOW

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

JBF 9-30-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: MW-303-31

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/28/ 1500

Company: Sealaska Environmental Services, LLC

Weather/Temperature: windy 10-15 mph S 57°F partial blue sky

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No protection	☐	☒

16. Previous well depth: 34.14' (URS 2013). Current well depth: 34.10'.

17. Depth to water: 27.70'

18. PID reading at wellhead: 2.7 ppm Breathing Zone: 0.0 ppm

Additional notes:

intake 27.7' - 35.5'

intake $\frac{27.7' + 35.5'}{2} = 31.6'$

✓ ASF 9.29.31

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-31

Inspector(s): E. Rodiofs D. Balmer Date/Time: 8/28/13 1610

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Windy 10-15 mph S 57°F partial Blue sky

Well Data

Diameter of Well Casing: 2 in

Depth to Water Below Top of Casing (feet): 27.27'

Total Depth of Well Below Top of Casing (feet): 34.10' 34.14' (URS 2013) FOR CALCULATION

Purge Method: Low flow peristaltic ABF 8-29-13

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.2'

Gallons per Foot: 0.16 Gallons in Well: 1.312

Three Times Casing Volume: 3.936 Gallons Purged from Well: 3.66

Water Sample Data

Sample Number: MW-303-31-2013

Time Sample Collected: 1610

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): None

Stabilized? yes 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1522	5.71	0.131	2.9	4.26	8.88	0.01	46
0.333	1526	5.72	0.130	0.2	2.92	7.31	0.01	8
0.666	1530	5.65	0.130	0.0	1.78	7.11	0.01	-5
1.00	1534	5.62	0.132	0.0	0.99	7.05	0.01	-12
1.33	1538	5.60	0.133	0.0	0.54	7.04	0.01	-17
1.66	1542	5.59	0.133	0.0	0.37	7.06	0.01	-19
2.00	1546	5.59	0.134	0.0	0.22	7.10	0.01	-22
2.33	1550	5.60	0.134	0.0	0.08	7.13	0.01	-26
2.66	1554	5.60	0.135	0.0	0.05	7.20	0.01	-28
3.00	1558	5.61	0.135	0.0	0.01	7.28	0.01	-30
3.33	1602	5.63	0.135	0.0	0.00	7.30	0.01	-33
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
1.5		2 ppm		32				
3.66	1606	5.63	0.135	0.0	0.00	7.31	0.01	-33

Notes:

ABF 8-29-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: MW-303-32

Inspector(s): E. Roelofs D. Balmer Date/Time: 0855 8/28/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Wind 10-20 mph N Overcast 52°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 4 Ballards	☒	☐

16. Previous well depth: 31.20' (YRS 2013). Current well depth: 31.10'.

17. Depth to water: 24.54' TC

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Tiny White Invertabrates found in well

Sul Screen 24.54' - 31' TC

Intake $\frac{(24.54' + 31')}{2} = 27.77'$

✓ AE 8-29-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-32

Inspector(s): E. Roelofs D. Balmer Date/Time: 8/28/2013 0950

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 52° 10-20mph N

Well Data

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 24.54'

Total Depth of Well Below Top of Casing (feet): 31.10' 31.20' (ARS 2013) USED FOR CALCULATION ABF 8-29-31

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.5

Gallons per Foot: 0.16 Gallons in Well: 1.04

Three Times Casing Volume: 3.12 Gallons Purged from Well: 1.0

Water Sample Data

Sample Number: MW-303-32-2013

Time Sample Collected: 0950

Sampling Method: low flow parastaltic

Remarks (Color/Odor): None

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
~~Initial~~	~~0930~~	~~4.28~~			~~10~~	~~12.22~~	~~0.00~~	~~256~~
Initial	0932	5.71	0.273	0.9	1.4	7.70	0.01	-68
0.333	0936	5.97	0.274	0.3	0.0	7.17	0.01	-84
0.666	0940	5.95	0.270	0.0	0.0	7.04	0.01	-88
1.0	0944	5.95	0.269	0.0	0.0	7.01	0.01	-88
1.33								

ER 8/28/13

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
0.0		75		75				

Notes: Tiny white invertebrates in well

1:10 Dilution for Fe^{2+}

ABF 8-29-31

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: MW-303-33 ~~2013~~ ER 8/27/13

Inspector(s): E. Roelofs / D. Baimer Date/Time: 8/27/2013 1505

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Light Rain 30-40 mph to North 57 °F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
See notes * 14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 4 ballards	☒	☐

16. Previous well depth: 29.00' (Sealaska 2009). Current well depth: 26.90'.

17. Depth to water: 22.92' TC

18. PID reading at wellhead: 4.7 ppm Breathing Zone: 0.0 ppm

Additional notes: 1' Stick up, 4 ballards

* Well was repaired 2013 PVC cut down aprox 2'

Heavy orange floc

Screen 17'-27' below ground surface

18'-28' TC

Sat screen 23'-28'

Intake 25.5'

ASF 8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-33

Inspector(s): E. Rodolfs D. Balmer Date/Time: 8/27/13 1505

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Wind 35-40 mph N

Well Data

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 22.92

Total Depth of Well Below Top of Casing (feet): 26.90

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5

Gallons per Foot: 0.16 Gallons in Well: 0.8

Three Times Casing Volume: 2.4 Gallons Purged from Well: 2.66

Water Sample Data

Sample Number: MW-303-33-2013

Time Sample Collected: 1635

Sampling Method: low flow parastaltic

Remarks (Color/Odor): heavy orange floc

Stabilized? yes 3 Casing Volumes Removed? yes

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1558	5.53	0.216	72.5	4.10	11.45	0.01	-65
.333	1602	6.08	.257	56.7	2.44	10.49	0.01	-58
.666	1606	5.96	0.260	55.0	2.91	9.74	0.01	-49
1.00	1610	5.94	0.260	56.6	2.03	10.00	0.01	-46
1.333	1614	5.94	.261	49.9	~~9.35~~ 1.74	9.68	0.01	-45
1.666	1618	5.94	.262	54.7	4.65	9.74	0.01	-45
2.00	1622	5.95	.262	52.2	5.18	9.83	0.01	-42
2.33	1626	5.97	.262	51.7	5.20	9.58	0.01	-41
2.66	1630	5.99	.263	52.2	5.02	9.57	0.01	-42

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
0.00		65		100				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

✓ ASF 8-28-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: MW-303-37

Inspector(s): A Lewis, R. Boyd Date/Time: 8/28/13 1400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, 5 mph wind N

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 18.48 ft btoc (URS 2013) Current well depth: 18.52 ft btoc

17. Depth to water: 13.07 ft btoc

18. PID reading at wellhead: 0.00 ppm RB 8/28/13 Breathing Zone: 0.0 ppm

Additional notes:

AB 8.29.13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-37

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/13 1400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, 5mph wind N

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 13.07

Total Depth of Well Below Top of Casing (feet): 18.48 (URS 2013) 18.52

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.41

Gallons per Foot: 0.16 Gallons in Well: 0.87

Three Times Casing Volume: 2.61 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: MW-303-37-2013

Time Sample Collected: 1445

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear, odorless

Stabilized? yes 3 Casing Volumes Removed? ND

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	1415	5.98	0.085	2	6.84	11.24	0.00	101
0.5	1420	5.68	0.095	Ø	6.20	10.62	0.00	141
1.0	1425	5.56	0.101	Ø	6.05	10.38	0.00	154
1.5	1430	5.51	0.103	Ø	5.99	10.29	0.00	162
2.0	1435	5.52	0.105	Ø	5.89	10.21	0.00	162
2.5	1440	5.53	0.105	Ø	5.74	10.17	0.00	164

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
5.5		Ø		17				

Notes: PID Breathing Zone: 0.0 ppm, well head: 0.0 ppm

ASF 8.29.31

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: MW-303-38

Inspector(s): G. Roelof D Balmer Date/Time: 3/28/13 1450

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Windy 10-15 mph S 57°F partial blue sky

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? See below ASF 8-29-13 Bollards loose	☐	☒
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards Loose	☒	☐

16. Previous well depth: 30.55'. Current well depth: 30.55'.

17. Depth to water: 25.40' (URS 2013)

18. PID reading at wellhead: 9.6 ppm Breathing Zone: 0.0 ppm

Additional notes: Cover and cap of monument unsecured. Bollards are loose

Sat screen 25.40' - 30.55'

Intake $\frac{25.40' + 30.55'}{2} = 27.975$

ASF 8-29-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66 ER 8/29/13

Site Name: Area 303 Sample Location: MW-303-38-~~2013~~ ER 8/29/13

Inspector(s): E. Roelofs / D. Balmer Date/Time: ~~8/28/2013~~ 8/29/2013

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54° Partly cloudy / slight breeze / drizzle

Well Data

Diameter of Well Casing: 4 in

Depth to Water Below Top of Casing (feet): 25.4' TC

Total Depth of Well Below Top of Casing (feet): 30.55' TC (URS 2013)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.15

Gallons per Foot: 0.65 Gallons in Well: 3.348

Three Times Casing Volume: 10.04 Gallons Purged from Well: 1.66

Water Sample Data

Sample Number: MW-303-38-2013

Time Sample Collected: 1000

Sampling Method: low flow peristaltic

Remarks (Color/Odor): None

Stabilized? yes 3 Casing Volumes Removed? N/A

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0926	5.57	0.087	0.6	0.61	8.13	0.00	130
0.33	0930	5.55	0.089	0.5	0.53	8.65	0.00	108
0.66	0934	5.55	0.091	0.0	0.96	8.39	0.00	95
1.0	0938	5.54	0.093	0.0	1.18	8.20	0.00	82
1.33	0942	5.54	0.095	0.2	1.25	8.21	0.00	78
1.66	0946	5.53	0.096	0.0	1.28	8.18	0.00	72

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
1.5		2.0		20				

Notes: Used water level indicator tied to plastic tubing to get tubing positioned in the well. 1:2 Dilution Fe^{2+}

SF 9-1-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: MW-303-39

Inspector(s): A. Lewis Date/Time: 8/28/13 1535

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, 5 mph wind N

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? Bollards loose 8-29-13	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: light smell of petroleum	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 Bollards	☒	☐

16. Previous well depth: 28.78 ft btoc (URS 2013). Current well depth: 28.02 ft btoc (soft bottom)

17. Depth to water: 21.41 ft btoc (@1430)

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

#15 = No concrete keeping bollards stable - 2 are leaning - easily removable

8-29-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-39

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/13 1535

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, 5 mph wind N

Well Data

Diameter of Well Casing: ~~2"~~ 4" RBS 8/28/13

Depth to Water Below Top of Casing (feet): 21.41

Total Depth of Well Below Top of Casing (feet): 28.78 (URS 2013) 28.02 (salt bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.37

Gallons per Foot: ~~0.16~~ 0.65 RBS 8/28/13 Gallons in Well: 4.79

Three Times Casing Volume: 14.37 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: MW-303-39-2013

Time Sample Collected: 1630

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): light smell of petroleum - clear

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial .5	1559	6.00	0.203	4	8.21	8.41	0.00	158
1.0	1604	6.02	0.204	1	7.17	7.70	0.00	131
1.5	1609	6.01	0.204	Ø	6.70	7.59	0.00	113
2.0	1614	6.00	0.205	Ø	6.52	7.51	0.00	107
2.5	1619	5.99	0.205	Ø	6.40	7.44	0.00	105

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
5		30		20				

Notes: Orange particulate seen at initial purge, allowed to purge for ½ gallon prior to connecting to flow cell. Fe^{2+} dilution factor = 10

PID Breathing Zone: 0.0 ppm, Wellhead: 0.0 ppm

ABF 8-29-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: ~~SITE 3~~ AREA 303 (Well No.: MW-303-40

Inspector(s): J. Hightstone D. Schleiser Date/Time: 8/28/13 0929 ~~0929~~ 8/28/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F Cloudy MISTY

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 4" PVC		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
* 10. Is there an oily sheen on the water?	☒	~~☑~~ 8/28/2013
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	~~☑~~ 8/28/13
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: YES 3 BOLLARDS	☑	☐

16. Previous well depth: 18' . Current well depth: 17.98' .
Ahtna Drilling Construction Log 6/2/2012
17. Depth to water: 6.96'
18. PID reading at wellhead: 0.6 ppm Breathing Zone: 0.0 ppm

Additional notes: Oil Sheen is observed in the bucket while ~~Purge rate~~ Still Collecting Parameters

8-29-13

SEALASKA

WATER SAMPLING LOG

1 of 2

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-40

Inspector(s): T. Highstone B. Schleger Date/Time: 8/29/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F OVERCAST, WIND 10 MPH

Well Data

Diameter of Well Casing: 4"

Depth to Water Below Top of Casing (feet): 6.96'

Total Depth of Well Below Top of Casing (feet): 18' (Ahtna Constructor Log (April 2012))

Purge Method: Peristaltic Pump Low Flow

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 11.04

Gallons per Foot: 0.65 Gallons in Well: 7.176

Three Times Casing Volume: 21.53 Gallons Purged from Well:

Water Sample Data

Sample Number: MW-303-40-2013

Time Sample Collected:

Sampling Method: LOW FLOW PERISTALTIC PUMP

Remarks (Color/Odor): NO/NO oil sheen observed DB 8/12/13

Stabilized? 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1045	6.27	0.346	43.7	0.00	9.40	0.0	61
0.5	1050	6.15	0.334	40.6	0.00	9.34	0.0	74
1.0	1055	6.12	0.329	39.2	0.00	9.43	0.0	75
1.5	1100	6.09	0.331	40.8	0.00	9.62	0.0	61
2.0	1105	6.08	0.333	17.9	0.00	9.79	0.0	47
2.5	1110	6.03	0.338	18.3	0.00	9.79	0.0	45
3.0	1115	6.01						

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: PID: 0.4 AT WELLHEAD, 0.0 BREATHING ZONE

AJF 8-29-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SEALASKA

WATER SAMPLING LOG

2 of 2

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-40

Inspector(s): J Highstone B. Schlegel Date/Time:

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° F Cloudy

Well Data

Diameter of Well Casing: 4"

Depth to Water Below Top of Casing (feet): 6.96'

Total Depth of Well Below Top of Casing (feet): 18' (Aleutian 2012 Construction Log)

Purge Method: Low Flow Peristaltic pump

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 11.04

Gallons per Foot: 0.65 Gallons in Well: 7.176

Three Times Casing Volume: ~~0.65~~ 21.53 KSF 7-29-13 Gallons Purged from Well: 5.0

Water Sample Data

Sample Number: MW-303-40-2013

Time Sample Collected: 1153

Sampling Method: Low Flow Peristaltic pump

Remarks (Color/Odor): NO/NO

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1130	6.12	0.345	27.8	0.00	10.13	0.0	42
3.5	1135	6.02	0.349	12.8	0.00	9.76	0.0	45
4.0	1140	6.00	0.353	6.6	0.00	9.73	0.0	47
4.5 ~~5.5~~ KSF 8/29	1145	5.96	0.352	9.9	0.00	9.72	0.0	49
5.0	1150	5.95	0.348	9.9	0.00	9.77	0.0	48

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
1.0 ppm		2.0 ppm		25 ppm				

Notes: Had to change pumps at 1115 since pump stopped working. GALLONS PURGED CONTINUED FROM PAGE 1. PHOTO TAKEN 1217

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

KSF 7-29-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303 Well No.: MW-303-41

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/29/13 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F, 5 mph wind N, light rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" PVC		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☒	☐
12. Is there product in the well?	☐	☒
13. If so, product thickness _____.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 25.68 ft btoc (URS 2013). Current well depth: 25.61 ft btoc (soft bottom) light mud at 25.12 ft btoc

17. Depth to water: DRY

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Probe sounding water at 24.92 ft btoc, no water on probe (triple checked). Orange particulate on probe

RSF 8-29-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-41

Inspector(s): A. Lewis, R. Bayl Date/Time: 8/29/13 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F, 5 mph wind N, light rain

Well Data

Diameter of Well Casing: 4"

Depth to Water Below Top of Casing (feet): Dry

Total Depth of Well Below Top of Casing (feet): 25.68 (URS 2013) 25.61

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet):

Gallons per Foot: 0.65 Gallons in Well:

Three Times Casing Volume: Gallons Purged from Well:

Water Sample Data

Sample Number: MW-303-41-2013

Time Sample Collected:

Sampling Method: low-flow peristaltic

Remarks (Color/Odor):

Stabilized? 3 Casing Volumes Removed?

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: PID Breathing Zone: 0.0 ppm wellhead: 0.0 ppm

Did not collect sample due to well being dry. Probe sounding water at 24.92 ft btoc, no water on probe (triple checked) Light mud at 25.12 ft btoc, DTB = 25.61 ft btoc (soft bottom)

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Orange particulate on Probe

✓ AJF 13
AJF 8-29-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: AREA 303 Well No.: MW-303-42

Inspector(s): J. Highstone B Schleger Date/Time: 8/28/13 0857

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST 57°F MIST WIND GUST 15 mph

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly CAP		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Heavy Smell of petroleum at time of sample	☑	☐
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness 0.01'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 Bollards	☑	☐

16. Previous well depth: 33.5' Current well depth: 33.29 ft btoc (soft bottom)
HITNA 2012 CONSTUCTION LOG APRIL 31, 2013
17. Depth to water: 28.95' (28.90 8/29/13)
18. PID reading at wellhead: 0.5 ppm Breathing Zone: 0.0 ppm

Additional notes:
#9 light petroleum odor
DTP 28.94'

8-29-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-42

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/29/13 0935

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F, 5 mph wind N, light rain

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 28.90

Total Depth of Well Below Top of Casing (feet): 33.28 (URS 2013) 33.29 (soft bottom)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4.38

Gallons per Foot: 0.16 Gallons in Well: 0.70

Three Times Casing Volume: 2.10 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: MW-303-42-2013

Time Sample Collected: 1030

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): Clear water (some orange particulate seen), Heavy Swell of petroleum

Stabilized? NO 3 Casing Volumes Removed? yes

	Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
	initial	0953	6.18	0.286	15	3.01	8.71	0.00	163
0.5	0958	→	6.15	0.282	10	2.14	8.56	0.00	140
1.0	1003	→	6.16	0.277	10	1.59	8.48	0.00	114
1.5	1008	→	6.14	0.276	12	1.27	8.35	0.00	92
	2.0	1013	6.18	0.273	15	1.15	8.31	0.00	75
	2.5	1018	6.20	0.272	11	1.01	8.32	0.00	59

TEST KIT RESULTS

DO (ppm) 8/29/13	DO (ppm) Dup	Fe^{2+} (ppm)	Fe^{2+} (ppm) Dup	CO_2 (ppm)	CO_2 (ppm) Dup			
0.7 → ~~0.70~~ 0.75	0.7	25	25	13	13			

Notes: PID Breathing Zone: 0.0 ppm, wellhead: 54 ppm

Removed SOCK, no product in well. MS/MSD on NAPS only.

Fe^{2+} dilution factor = 10. RPD = 0 for all test kit results

✓ 8/29/13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: AREA 303 Well No.: MW-303-43

Inspector(s): J. Highstone B. Schleger Date/Time: 8/28/13 0905

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F 15mph winds overcast

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly CAP		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well? ~~3 Bollards~~ BG 8/28/13 NO	~~☑~~	☑ BG 8/28/13
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: 3 Bollards	☑	☐

16. Previous well depth: 33.5'. Current well depth: 33.81'.
AECOM WELL CONSTRUCTION LOG 5/31/2012
17. Depth to water: 29.01'
18. PID reading at wellhead: 0.8' ppm Breathing Zone: 0.0' ppm

Additional notes:

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-43

Inspector(s): J. Highstone B. Schlager Date/Time: 8/28/13 ~~1527~~ 1542

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F 15 mph winds OVERCAST

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 29.01

Total Depth of Well Below Top of Casing (feet): 33.5' (TAKE FROM Ahtna 5/3/12 Construction Log)

Purge Method: LOW FLOW PERISTALTIC PUMP

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4.49

Gallons per Foot: 0.16 Gallons in Well: 0.718

Three Times Casing Volume: 2.16 Gallons Purged from Well: 1.0

Water Sample Data

Sample Number: MW-303-43-2013

Time Sample Collected: 1634

Sampling Method: LOW FLOW PERISTALTIC PUMP

Remarks (Color/Odor): CLEAR / NO ODOR

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1612	5.79	0.334	2.7	0.32	8.40	0.0	68
0.25	1617	5.55	0.333	2.2	0.00	8.25	0.0	71
0.50	1622	5.51	0.338	1.0	0.00	8.31	0.0	75
0.75	1627	5.48	0.338	1.0	0.00	8.30	0.0	76
1.00	1632	5.47	0.335	1.1	0.00	8.31	0.0	80

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
2.0 ppm		0.6 ppm		60 ppm				

Notes: PID: 0.0 ppm AT WELLHEAD, 0.0 ppm BREATHING ZONE

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

✓ ASF 8-29-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: AREA 303 Well No.: ~~MW-44~~ 8/27/13 MW-303-44

Inspector(s): J. Hightstone B. Schlegel Date/Time: 8/28/13 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57° Cloudy/MISTY

	Yes	No
1. Was the monitoring well located?	☑	☐
*2. Is the well clearly labeled? If not, please re-label. RELABEL LABELED AS MW-303-40	☐	☑
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly lid		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☐	☑
15. Are there well protections? Type: YES 3 Bollards	☑	☐

16. Previous well depth: 32' Current well depth: 33.5'.
(Attach well construction log APM 3020.2)

17. Depth to water: 29.54'

18. PID reading at wellhead: 0.2 ppm Breathing Zone: 0.0 ppm

Additional notes:

#2 WAS MARKED MW-303-40

PICTURE TAKEN 1013

ABF 8-29-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303 Sample Location: MW-303-44

Inspector(s): T. Highstone B. Schlegel Date/Time: 8/29/2013

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 29.54' ~~(Altna 2012 Construction Log)~~ BS 8/29/13

Total Depth of Well Below Top of Casing (feet): 32' (Altna 2012 Construction Log)

Purge Method: Peristaltic pump low flow

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 2.46

Gallons per Foot: ~~30~~ 0.16 Gallons in Well: ~~30~~ BS 8/29/13 0.39 gal

Three Times Casing Volume: 1.18 Gallons Purged from Well: 0.75

Water Sample Data

Sample Number: MW-303-44-2013

Time Sample Collected: 0935

Sampling Method: Low flow Peristaltic pump

Remarks (Color/Odor): NO / NO

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	0903	5.98	0.395	0.0	0.00	8.15	0.0	109
0.125	0908	5.83	0.390	2.7	0.00	8.07	0.0	62
0.250	0913	5.80	0.390	3.3	0.00	7.98	0.0	33
0.375	0918	5.80	0.389	4.2	0.00	7.96	0.0	23
0.500	0923	5.81	0.388	5.2	0.00	8.05	0.0	13
0.625	0928	5.81	0.386	5.1	0.00	8.07	0.0	11
0.750	0933	5.83	0.387	5.4	0.00	8.02	0.0	11

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
1.0 ppm		20 ppm		45 ppm				

Notes: PID 0.0ppm at wellhead and breathing zone

ASF 8-29-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Area 303/SWMU 62 Well No.: MRP-MW2

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/13 1105

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, 5mph wind N

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" PVC slipcap		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Moderate smell of Petroleum	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 x Bollards	☒	☐

16. Previous well depth: 27.92 ftbtoc (from 2 2012) Current well depth: 28.02 ftbtoc (solid bottom)

17. Depth to water: 21.69 ftbtoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

ABL 8/29/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Area 303/SWMU 62 Sample Location: MRP-MW2

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/13 1105

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, 5 mph wind N

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 21.69

Total Depth of Well Below Top of Casing (feet): 27.92 (2012 Team 2),

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): ~~6.23~~ 6.23

Gallons per Foot: 0.16 Gallons in Well: ~~0.87~~ AL 8/27/13 0.996

Three Times Casing Volume: ~~2.61~~ 2.990 AL 8/27/13 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: MRP-MW2-2013 | Dup: MRP-MW12-2013

Time Sample Collected: 1200 | 1210

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): moderate petroleum odor, clear w/ coarse particulate

Stabilized? NO 3 Casing Volumes Removed? yes

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial .5	1127	5.89	0.244	21	1.39	9.63	0.00	-25
1.0	1132	6.05	0.269	10	0.20	9.25	0.00	-40
1.5	1137	6.13	0.272	10	0.10	9.28	0.00	-37
2.0	1142	6.21	0.272	5	0.00	9.30	0.00	-21
2.5	1147	6.23	0.275	~~0~~	0.00	9.32	0.00	-9
3.0	1152	6.24	0.275	2	0.00	9.40	0.00	-24

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
0.05		40		11				

Notes: Orange particulate seen at initial (Heavy), then throughout purge (light)

PID Breathing Zone: 0.0ppm wellhead: 0.0ppm

Fe^{2+} dilution factor = 10

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

AJS 8-29-13

Shoreline
Visual Inspection Checklist

Project Name: ~~Area 3~~ ADAK LTM 2013 (BF 12-30-13) Project No.: TO 66

Site Name: AREA 303

Inspector(s): J. HIGNSTONE, B. SCHREIGER Date/Time: 9-10-13 / 1050

Company: SEALASKA ENVIRONMENTAL SERVICES, LLC

Weather/Temperature: 52° F OVERCAST WINDS 15 MPH

		Yes	No
1.	Was a contaminant seep located? If yes, describe the seep (including length and width) and flow rate.	☐	☒
2.	Is the seep flowing directly into a surface water body?	☐	☒
3.	Is this a new seep or a seep that has been previously documented?		
4.	Are there any odors? If yes, describe odor and intensity	☐	☒
5.	Is there distressed vegetation growing at the seep location? N.A.	☐	☐
6.	Is the shoreline discolored by suspected contamination? If yes, describe appearance, location, and square footage	☐	☒

SOME BIOGENIC SHEEN ON SURFACE WATER IN MARSHY AREAS

8.	Is any suspect ordnance found on the shoreline? If yes, describe the location and approximate size and shape, and color without approaching ordnance. Note location on back of form. Secure area. Stop work! Notify Navy CSO immediately!	☐	☒
9.	Was there any other manmade debris (exclude items from off-island activities) found on the shoreline that could likely be contributing to contamination? If yes, describe.	☐	☒

Additional Notes: AREA WAS HEAVILY VEGETATED AND MARSHY. SHORELINE INSPECTED INCLUDED EAST AND NORTH SHORES FOR APPROXIMATELY 50 FEET OF EAST CANAL, NORTH OF SWMU 62 RECOVERY TRENCH (TOP OF CANAL SECTION). SURFACE WATER WAS MINIMAL AND HAD BIOGENIC SHEEN BUT NO PETROLEUM VISIBLE.

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Former Power Plant Well No.: 01-118

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/26/2013 1800

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rainy 53°F wind 5mph

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in Slip cap		
5. Specify size and number of bolts on flush-mount cap: 3 bolts 3/16 in		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: slight odor when sampled	☐	☒ DKB 9/12/13
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No ballards	☐	☒

16. Previous well depth: 29.46'. Current well depth: 29.45'.

17. Depth to water: 16.55' (2011)

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Numerous tiny white invertabrates living in well
Intake 23.005'

✓ ASF 9/28/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Former Power Plant Sample Location: 01-118

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/27/2013 1750

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Periodic Rain 20-30 mph gusts wind S/SW 56°F

Well Data

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 16.55

Total Depth of Well Below Top of Casing (feet): 29.45

Purge Method: low flow peristaltic pump

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 12.91

Gallons per Foot: 0.16 Gallons in Well: 2.065

Three Times Casing Volume: 6.197 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 01-118-2013

Time Sample Collected: 1020

Sampling Method: slow intake peristaltic pump

Remarks (Color/Odor): Slight Odor

Stabilized? yes 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1002	5.93	0.420	6.5	0.00	9.52	0.02	-96
0.337	1006	5.93	0.421	6.1	0.00	8.77	0.02	-108
0.666	1010	5.91	0.423	6.0	0.00	8.87	0.02	-110
1.0	1014	5.88	0.425	8.2	0.00	8.81	0.02	-111

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
0.2		45		200				

Notes:

ABF 8/28/13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

2

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Former Power Plant Well No.: 01-150

Inspector(s): E. Roelofs D Balmer Date/Time: 8/26/13 1540

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rainy slight wind 5 mph N 53°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 1½ J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Slight petroleum odor ? hng while invertebrates	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type:	☐	☒

16. Previous well depth: 27.05'. Current well depth: 27.03'.

17. Depth to water: 19.84' TC

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: 3 ft stick up

Intake 23.5'

ASF
8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Former Power Plant Sample Location: 01-150

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/27/13 1220

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Windy 30-35 mph SW

Well Data

Diameter of Well Casing: 1 1/2 in

Depth to Water Below Top of Casing (feet): 19.84'

Total Depth of Well Below Top of Casing (feet): 27.03'

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7'

Gallons per Foot: 0.10 Gallons in Well: 0.7

Three Times Casing Volume: 2.1 Gallons Purged from Well: 1.33

Water Sample Data

Sample Number: 01-150-2013

Time Sample Collected: 1220

Sampling Method: low flow parastaltic

Remarks (Color/Odor): Slight odor & tiny white microbes

Stabilized? yes 3 Casing Volumes Removed? N/A

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1148	6.00	0.297	0.0	0.48	15.30	0.01	-54
0.333	1152	5.93	0.307	0.0	0.00	14.26	0.01	-58
0.666	1156	5.91	0.311	1.0	0.00	13.55	0.01	-57
1.00	1200	5.90	0.317	1.9	0.00	13.16	0.01	-57
1.33	1204	5.90	0.316	1.6	0.00	13.28	0.01	-56

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
0.9		35		100				

Notes: tiny invertabrates found in well, white in color (water bears)

ASF

✓ 8-28-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Former Power Plant, Building T-1451 Well No.: MW-1451-1

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/26/13 1040

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F, partial sun, 5 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? BOLLARDS AFE LOOSE	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: light smell of petroleum	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness _____.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards (loose)	☒	☐

16. Previous well depth: 15.5 ft btoc (August 2012) Current well depth: 15.15 ft btoc solid bottom

17. Depth to water: 6.51 ft btoc

18. PID reading at wellhead: 0.4 ppm Breathing Zone: 0.0 ppm

Additional notes: _____

✓ ASF 8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Former Power Plant, Building T-1451 Sample Location: MW-1451-1

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/26/13 | 1040

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°, partial sun, smph wind S.

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 6.51

Total Depth of Well Below Top of Casing (feet): 15.5 (Ahtna 2012), 8/26/13 15.15

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.99

Gallons per Foot: 0.16 Gallons in Well: 1.44

Three Times Casing Volume: 4.32 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: MW-1451-1-2013

Time Sample Collected: 1230

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): light sheen of petroleum

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial 200mL	1206	6.42	0.456	3	0.00	10.17	0.02	-71
0.5 ~~600mL~~ AL 8/26/13	1211	6.36	0.435	3	0.00	10.12	0.02	-74
1.0 ~~1000mL~~ AL 8/26/13	1216	6.36	0.428	2	0.00	10.11	0.02	-75
1.5	1221	6.34	0.431	2	0.00	10.14	0.02	-75

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
Ø ppm		2ppm		100ppm				

Notes: ~~400mL/5min~~ AL 1/2 g/5 min

✓ ASF 8-28-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: FORMER POWER PLANT Well No.: MW-1451-2

Inspector(s): J. Highstone B. Schleiger Date/Time: 8/26/13 1532

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57° overcast light wind

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly Cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☐	☑
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	~~☐~~	☑
13. If so, product thickness _____.		
14. Is the well depth consistent with past depth measurements?	☐	☑
15. Are there well protections? Type: 3 bollards	☑	☐

16. Previous well depth: 15' . Current well depth: 14.42' .
ANTNA ~~AOM~~ 2012 Contractor Log
17. Depth to water: 6.06
18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes: #7 MONUMENT BASE IS CRACKED, WATER POOLING AT BASE AND AROUND CASING AREA
#15 Bollards are lose AT THE WELL

8/27/13

✓ 4.28.13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Former Powerplant Sample Location: MW-1451-2

Inspector(s): J. Highstone B. Schleiger Date/Time: 8-27-13/1528

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57° overcast 20mph wind Misty

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 6.10'

Total Depth of Well Below Top of Casing (feet): 15'

Purge Method: PERISTALTIC PUMP

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.9

Gallons per Foot: 0.16 Gallons in Well: 1.42

Three Times Casing Volume: 4.3 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: MW-1451-2-2013 / DUP MW-1451-12-2013 ASF 8-28-13

Time Sample Collected: 1615 DUP 16:20 GW 8/13-13

Sampling Method: LOW FLOW PERISTALTIC PUMP

Remarks (Color/Odor): NO

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1541	5.93	1.00	51.3	0.00	12.06	0.0	-102
0.5	1546	6.11	0.999	44.5	0.00	12.06	0.1	-117
1.0	1551	6.13	0.999	52.7	0.00	12.20	0.1	-119
1.5	1556	6.15	0.999	73.6	0.00	12.03	0.0	-122
2.0	1601	6.17	0.999	86.5	0.00	12.05	0.0	-121
2.5	1606	6.19	0.90	86.7	0.00	12.09	0.0	-122
3.0	1611	6.20	0.90	87.9	0.00	12.14	0.0	-123

TEST KIT RESULTS 8-26-13 →

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)		DO ppm	Fe^{+2} ppm	CO_2 ppm
0.05		40		100		0.0/0.0	30/30	100/100

ASF 8-28-13

Notes: [DUP MW-1451-12-2013] TIME 1620

TEST KIT DUPLICATE PERFORMED ON 8-26-13. LAB ALIQUOTS RECOLLECTED ON 8-27-13 DUE TO QC DISCREPANCY. SEE LOGBOOK FOR DETAILS. RPD 0% FOR ALL TEST KITS.

ASF 8-28-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: FORMER POWERPLANT Well No.: MW-1451-3

Inspector(s): J Highstone B. Schlegel Date/Time: 8/~~28~~ 27/13 ~~0950~~ 0950 ~~BS~~ 8/28/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F windy GUSTS OVERCAST AND Humid

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition? BOLLARDS LOOSE ASF 8-29-13	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well? TRACE FROM 8-29-13 SAMPLING ASF 8-29-13	☐	☑
13. If so, product thickness _____.		
14. Is the well depth consistent with past depth measurements?	☐	☑
15. Are there well protections? Type: 3 Bollards	☑	☐

16. Previous well depth: 14.5' . Current well depth: 13.62' .

17. Depth to water: 5.27' ~~(URS APRIL 2013)~~ ~~BS~~

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Bollards LOOSE # OF BOLLARDS 3
#16 Previous Depth ANTNA 2012 Construction Log

✓ ASF 8-29-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: FORMER POWERPLANT Sample Location: MW-1451-3

Inspector(s): B Schwegr J. Hylstone Date/Time: 8/28/13 1050

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F OVERCAST

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 3.91'

Total Depth of Well Below Top of Casing (feet): 14.5' (FROM PROJ. AHTNA 2012 CONSTRUCTION LOG)

Purge Method: PERISTALTIC PUMP

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 14.5 - 3.91 = 10.59'

Gallons per Foot: 10.59 0.16' Gallons in Well:

Three Times Casing Volume: 1.69x3=5.08 Gallons Purged from Well: 4.5

Water Sample Data

Sample Number: MW-1451-3-2013

Time Sample Collected: 1152

Sampling Method: LOW FLOW PUMP

Remarks (Color/Odor): CLEAR / NO ODOR

Stabilized? YES 3 Casing Volumes Removed?

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1105	6.21	0.999	2.6	2.63	10.22	0.0	120
.5	1110	6.39	0.921	2.7	1.58	10.12	0.0	92
1.0	1115	6.49	0.882	2.6	1.16	9.58	0.0	77
1.5	1120	6.55	0.851	1.5	0.78	9.92	0.0	64
2.0	1125	6.57	0.838	2.3	0.40	9.84	0.0	50
2.5	1130	6.60	0.798	1.5	0.00	9.78	0.0	41
3.0	1135	6.61	0.794	1.6	0.00	9.72	0.0	33
3.5	1140	6.63	0.774	1.8	0.00	9.72	0.0	28
4.0	1145	6.64	0.760	1.8	0.00	9.68	0.0	25
4.5	1150	6.63	0.762	1.7	0.00	9.69	0.0	22

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
1.0		1		18				

Notes: TRACE PRODUCT.

BF 8-29-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: FORMER POWER PLANT Well No.: MW-451-4

Inspector(s): J. HIGHSTONE B Schlegel Date/Time: 8/26/13 1031

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F OVERCAST LIGHT WIND

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition? BOLLARDS LOOSE ABF 8/26/13	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	~~☒~~	~~☑~~ 8/27/13

13. If so, product thickness TRACE.

14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: Bollards 3 OF THEM	☑	☐

16. Previous well depth: 14.5'. Current well depth: 14.9'.

17. Depth to water: AETNA ~~ORIG~~ APRIL 2012 LOG 6.0' 8/29/13

18. PID reading at wellhead: 0.1 ppm Breathing Zone: 0.0 ppm

Additional notes: # 15 Bollards loose at the well

✓ ABF 8/29/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66 BJ 8/28/13

Site Name: Former Power Plant Sample Location: MW-1451-4-~~20~~

Inspector(s): J. Hightstone B. Schlegel Date/Time: 8/28/13 1353

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, WIND 20 mph, 55°

8/28/13 **Well Data**

Diameter of Well Casing: ~~2"~~ BJ 2"

Depth to Water Below Top of Casing (feet): 6.03'

Total Depth of Well Below Top of Casing (feet): 14.5' (Aktna 2012 Construction log)

Purge Method: LOW FLOW Peristaltic PUMP

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.47

Gallons per Foot: 0.16 Gallons in Well: 1.35

Three Times Casing Volume: 4.06 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: MW-1451-4-2013

Time Sample Collected: 1440

Sampling Method: LOW FLOW PERISTALTIC PUMP

Remarks (Color/Odor): CLEAR / NO ODOR

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1412	5.65	0.386	0.5	0.00	6.89	0.0	-11
.5	1417	5.75	0.371	0.4	0.00	6.92	0.0	-17
1.0	1422	5.80	0.368	0.6	0.00	6.99	0.0	-27
1.5	1427	5.83	0.367	0.5	0.00	7.02	0.0	-32
2.0	1432	5.88	0.368	0.0	0.00	6.98	0.0	-35
2.5	1437	5.90	0.369	0.1	0.00	7.01	0.0	-33

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
1.0 ppm		0.0		25 ppm				

Notes: PID 0.0 ppm AT CASING AND BREATHING ZONE

ASF 8/29/13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Former Power Plant Well No.: MW-1451-5

Inspector(s): E. Ruelofs / D. Balmer Date/Time: 8/26/13 1535

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rainy 5mph wind N 53°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness _____.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 ballards	☒	☐

16. Previous well depth: 15.81'. Current well depth: 15.80'.

17. Depth to water: 6.81ft

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes:

Mid intake 11.5'

BF 8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Former Power Plant Sample Location: MW-1451-5

Inspector(s): E. Roelofs D. Balmer Date/Time: 8/26/13 1535

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Raining, slight breeze 5 mph N, 53 degrees F

Well Data

Diameter of Well Casing: 2 in PVC

Depth to Water Below Top of Casing (feet): 6.81 ft 1535 (time)

Total Depth of Well Below Top of Casing (feet): 15.80'

Purge Method: Low flow peristaltic Intake set at 11.5' tc.

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 9 ft

Gallons per Foot: 0.16 Gallons in Well: 1.44

Three Times Casing Volume: 4.32 Gallons Purged from Well: 1.0

Water Sample Data

Sample Number: MW-1451-5-2013

Time Sample Collected: 1635

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): N/A

Stabilized? yes 3 Casing Volumes Removed? Well Stabilized

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1615	6.10	0.173	0.0	0.08	11.00	0.01	-49
0.33	1619	6.14	0.174	0.0	0.00	10.37	0.01	-53
0.666	1623	6.12	0.174	0.0	0.00	9.95	0.01	-53
~~0.~~ 1.0	1627	6.10	0.173	0.0	0.00	9.72	0.01	-52

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
0		20		60				

Notes:

ASF 8-28-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66 8-28-13 ASF

Site Name: FORMER POWER PLANT Well No.: MW-1451-6-~~2013~~

Inspector(s): J. Highstone B. Schlegel Date/Time: 8/27/13 1130

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F windy and overcast

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly Lid		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition? BOLLARDS LOOSE	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☐	☑
15. Are there well protections? Type: Bollards (3)	☑	☐

16. Previous well depth: 14.75'. Current well depth: 13.55'.

17. Depth to water: ANTNA 5.29' ~~(CRS Analysis)~~ 8/27/13 2012 construction log

18. PID reading at wellhead: 3.5 ppm Breathing Zone: 0.0 ppm

Additional notes: Bollards loose

✓ ASF 8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: FORMER POWERPLANT Sample Location: MW-1451-6

Inspector(s): J Highstone B. Schleger Date/Time: 8/27/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F overcast windy

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 5.29

Total Depth of Well Below Top of Casing (feet): 14.75' (ARCNA 2012) ~~ASV~~ 8-28-13

Purge Method: Low Flow Peristaltic Pump

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): ~~14.75~~ 9.46

Gallons per Foot: 0.16 Gallons in Well: 1.51

Three Times Casing Volume: 4.54 Gallons Purged from Well: 4.5

Water Sample Data

Sample Number: MW-1451-6-2013

Time Sample Collected: 1238

Sampling Method: Low Flow, Peristaltic Pump

Remarks (Color/Odor): CLEAR/NO ODOR sheen on water DKB 9/12/13

Stabilized? NO 3 Casing Volumes Removed? YES

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1152	6.46	0.552	17.1	0.34	9.64	0.0	-88
0.5	1157	6.17	0.496	14.6	0.00	9.81	0.0	-94
1.0	1202	6.14	0.501	16.0	0.00	9.83	0.0	-97
1.5	1207	6.13	0.503	17.9	0.00	9.77	0.0	-100
2.0	1212	6.14	0.502	21.2	0.00	9.90	0.0	-103
2.5	1217	6.15	0.518	24.2	0.00	9.89	0.0	-105
3.0	1222	6.16	0.524	27.4	0.00	10.14	0.0	-106
3.5	1227	6.16	0.525	32.6	0.00	10.07	0.0	-107
4.0	1232	6.18	0.525	37.8	0.00	10.07	0.0	-108
4.5	1236	6.18	0.524	38.5	0.00	10.05	0.0	-109

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
1.0 ppm		50 ppm		75 ppm				

Notes: Trace product measured

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Former Power Plant, Building T-1451 Well No.: MW-1451-7

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/26/13 1610

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, rain, 5 mph wind

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? Bollards are loose	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. Moderate smell of petroleum	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.5 ft. Recovered 0.38 L		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards (loose)	☒	☐

16. Previous well depth: 15.5 ft btoc (Altman 2012) Current well depth: 15.04 ft btoc

17. Depth to water: 6.96 ft btoc

18. PID reading at wellhead: 0.2 ppm Breathing Zone: 0.0 ppm

Additional notes: DTP = 6.46 ft btoc

No sample collected due to PT ≥ 0.02' (SLW)

✓ RBF 8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Former Power Plant Building T-1451 Sample Location: MW-1451-7

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/26/13 1610

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°, Rain, 5mph wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 6.96 DTP = 6.46

Total Depth of Well Below Top of Casing (feet): 15.04

Purge Method: NA

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.08

Gallons per Foot: 0.16 Gallons in Well: 1.29

Three Times Casing Volume: 3.88 Gallons Purged from Well: NA

Water Sample Data

Sample Number: MW-1451-7-2013

Time Sample Collected: NA

Sampling Method: NA

Remarks (Color/Odor): Moderate smell of petroleum

Stabilized? NA 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				

Notes: Did not collect sample, as per stand-alone specific instruction #9 & WS#17 of SAP.
PT = 0.5 ft, PT > 0.02 ft

BF 8-28-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Former Power Plant Well No.: MW-1451-8-~~2013~~ ASF 8-28-13

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/26/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: overcast, 55 °F, slight breeze

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 16.11' (URS 2013). Current well depth: 15.80'.

17. Depth to water: 6.97' TC

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Slight stale odor

ASF 8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Former Power Plant Sample Location: MW-1451-8-~~2013~~ ER 8/26/13

Inspector(s): E. Ruelofs D. Balmer Date/Time: 8/26/13 1123

Company: Sealaska Environmental Services, LLC

Weather/Temperature: partly sunny S Breeze 56°F

Well Data

Diameter of Well Casing: 2 in

Depth to Water Below Top of Casing (feet): 6.97' 8/26/13

Total Depth of Well Below Top of Casing (feet): ~~7 to 16 9ft~~ ER 15.80 ft

Purge Method: low flow peristaltic pump

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7 to 16 ft = 9 ft

Gallons per Foot: 0.16 Gallons in Well: 1.44

Three Times Casing Volume: 4.32 Gallons Purged from Well: 3 well stabilized

Water Sample Data

Sample Number: MW-1451-8-2013

Time Sample Collected: 1220

Sampling Method: low flow peristaltic pump

Remarks (Color/Odor): slight odor

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Inital	1123	2.72	0.016	2.0	2.25	15.40	0.01	147
0.5	1128	0.48	0.199	0.2	0.00	14.02	0.01	137
1.0	1132	0.24	0.196	0.0	0.00	13.80	0.01	125
1.5	1137	0.09	0.197	0.3	0.00	13.19	0.01	122
Initial 2	1207	4.57	0.201	1.3	0.00	11.94	0.01	-80
0.5	1212	4.53	0.201	0.8	0.00	11.95	0.01	-83
1.0	1217	4.51	0.201	0.7	0.00	11.84	0.01	-82
1.5	1222							
		~~3.99~~	~~.215~~	~~0~~	~~0~~	~~8.92~~	~~.01~~	~~6~~ ER 8/26/13
		3.99	0.215	0.0	0.0	8.92	0.01	6
	13.10	5.86	0.239	1.94	0.0	10.46	0.01	7

Team 2

Team 1

* post sampling parameters see LOG BOOK FOR Details

~~DF~~ 8/28/13

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
1		20		90				

Notes: 1137 cleaned out PH probe reconnected to flow cell

PH increase to 4.86 continued to get suspicious pH readings.

Resumed stabilization 1207

Ferrous iron test kit: 2x dilution - reading of 10 ppm = 20 ppm

DF 8/28/13

Per Sampling Deviation Form, post-sampling parameters (from Team 1 notes) will be reported. SW 9/13/13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: FORMER POWERPLANT Well No.: MW-1451-9

Inspector(s): J. Highstone B. Schlegel Date/Time: 8/28/13 1521

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST LIGHT WIND 56°F

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☑	☐
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness 0.02'. DTP = 9.75' ASF 8-29-13		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: 3 Bollards	☑	☐

16. Previous well depth: 16.50 (AMWA 2012) Current well depth: 16.15' AT 1829 ON 8/26/13 ASF 8-29-13

17. Depth to water: 8.77' AT 1849 ON 8/26/13

18. PID reading at wellhead: 0.3 ppm Breathing Zone: 0.0 ppm

Additional notes: PHOTO FOR PHOTO LAB TAKEN AT SITE AT 1523

No sample collected due to PT ≥ 0.02' (SW)

✓ASF
8-28-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Former Power Plant, Building T-1451 Well No.: E-701

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/26/13 1715

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, rain, 5mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" PVC Slip cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No Bollards	☐	☒

16. Previous well depth: 24.21 (2009) Current well depth: 24.26.

17. Depth to water: 18.43

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: No Bollards

✓ RBF
8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Former Power Plant, Building T-1451 Sample Location: E-701

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/13 0950

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58°F, 15 mph wind S

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 18.43

Total Depth of Well Below Top of Casing (feet): 24.21 (2009)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.78

Gallons per Foot: 0.16 Gallons in Well: 0.92

Three Times Casing Volume: 2.77 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: E-701-2013

Time Sample Collected: 1040

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): No odor, clear water

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	1017	6.25	~~0.209~~ 0.111	Ø	6.33	13.78	0.00	203
.5	1021	6.30	0.110	1	6.19	12.12	0.00	204
1.0	1025	6.31	0.110	1	6.07	12.05	0.00	205
1.5	1029	6.33	0.108	1	5.92	12.03	0.00	207

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
5		Ø		11				

Notes: MS/MSD

PID Breathing Zone: 0.0ppm, wellhead: 0.0ppm

ASF 8-28-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Former Power Plant, Building T-1451 Sample No.: NL-08-2013, Dup. NL-18-2013 [1145] [1155]

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/13 1135

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58°F, overcast, 20mph wind from South

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☒	☐
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☒	☐

#1. sheen seen along the surface of water body after sediment was disturbed

#2. light smell of petroleum during sampling

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results? .... ☐ ☒

4. If so, describe: N/A

5. Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage. ..... ☒ ~~☐~~ ASF 8-28-13

water was noticed higher than seen during previous inspections. Black staining seen 50ft N. around boom section 11.

6. Describe the sample (clear, colored, muddy, odors, etc.):

light brown cloudy water, light smell of petroleum

7. Is there vegetation growing nearby? ..... ☒ ☐

8. Are there signs of wildlife use nearby (birds, fish, etc.)? Eagle, teal, mallard ..... ☒ ☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep: _____

40ft wide, 16" deep - EAST CANAL ASF 8-28-13

8. Is erosion occurring? If yes, describe conditions and severity ..... ☐ ☒

9. Is deposition occurring in the water body? If yes, describe conditions ..... ☐ ☒

Additional Notes: Appears that seep along Boom 11 has migrated (EXPANDED) south of boom ~4ft. ASF 8-28-13

✓ ASF 8-28-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Former Power Plant, Building T-1455 Sample Location: NL-08 / Dup NL-18

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/13 1135

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58°F, 20 mph wind S

Well Data

Diameter of Well Casing: Surface Water

Depth to Water Below Top of Casing (feet): N/A

Total Depth of Well Below Top of Casing (feet): N/A

Purge Method: N/A

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): N/A

Gallons per Foot: N/A Gallons in Well: N/A

Three Times Casing Volume: N/A Gallons Purged from Well: N/A

Water Sample Data

Sample Number: NL-08-2013 Dup: NL-18-2013

Time Sample Collected: 1145 1155

Sampling Method: Grab

Remarks (Color/Odor): ~~No Odor~~ 8/27/13 light smell of petroleum.

Stabilized? N/A 3 Casing Volumes Removed? N/A

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	1140	6.84	0.905	26	8.41	12.67	0.0	-21
TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

✓ AJF 8-28-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Sediment Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Former Power Plant, Building T-1451 Sample No.: NL-08S-2013 [1740] NL-18S-2013 [1750] Dup

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/26/13 1735

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, rain, 5 mph wind S

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☒	☐

Top 1/4" light brown, further dark grey/black w/ 1/2" rocks, medium grain sand, some organic seen in sediment (minimal) and more in sample, light sheen observed at surface of sediment

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☐	☒
3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒
4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☒	☐
5. Is there vegetation growing in the sediment or nearby?	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Additional Notes: Location ID NL-08

Petroleum Seep at Boom 11 appears to have migrated ~4ft past (SOUTH) Boom 11. EXPANDED

#6: Greenwing teal nearby

Sample collected ~50ft south of Boom 11 seep.

ASF 8-28-13

Seep and Shoreline
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Former Power Plant, Building T-1451 Well No.: East Canal

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/13 1330

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 62°F, 20 mph winds S

	Yes	No
1. Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate.	☒	☐

Boom 11 seep ~ 3.4ft x 2ft (migrated/expanded ~ 4 ft south since 2012, high water reduced shoreline by ~ 2ft) *See photo "Eastcanal Boom 11 close-up"

2. Is the seep flowing directly into a surface water body?	☒	☐
3. Is this a new seep or a seep that has been previously documented? Previously documented		
4. Are there any odors? If yes, describe odor and intensity	☒	☐

Moderate petroleum odor near Boom 11, light petroleum odor near Boom 9/12 likely due to being downwind from Boom 11.

5. Is there vegetation growing at the seep location?	☒	☐
6. Is the shoreline discolored by suspected contamination? If yes, describe appearance, location, and square footage	☒	☐

Petroleum stained rocks, sediment & vegetation along Boom 11 and ~4ft south past Boom 11 w/surface sheening.

7. Is there vegetation growing on the shoreline?	☒	☐
8. Is any suspect ordnance found on the shoreline? If yes, describe the location and approximate size and shape, and color without approaching ordnance. Note location on back of form. Secure area. Stop work! Notify Navy CSO immediately!	☐	☒

9. Was there any other manmade debris (exclude items from off-island activities) found on the shoreline? If yes, describe debris, whether it could be contributing to contamination, and provide number of pieces or square footage of area.	☐	☒

Additional Notes: #2 Seep at Boom 11 likely flowing because of visible sheen, but flow is too slow to determine. No visible petroleum seep at remediated areas at Boom 9/12, ASF 8-29-13

✓ ASF 8-29-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: GCI Compound Well No.: 04-100

Inspector(s): J. Hightstone B. Schlegel Date/Time: 8/30/13 1616

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F Cloudy with sun breaks

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 1/2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water? no sheen seen in purge water SW	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness Trace.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: ~~Trace~~ RS 8/31/13	☐	☑

16. Previous well depth: 34.58' Current well depth: 34.57' *
9/3/12 TOSS well inspection
17. Depth to water: 28.38'
18. PID reading at wellhead: 82.1 ppm Breathing Zone: 0.0 ppm

Additional notes: waited 8 minutes to let well breath
*Hard bottom
1627 - PHOTO TAKEN FOR PHOTO LOG

ASF 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: ~~Former Power Plant~~ CCI COMPOUND (SS) 9/5/13 Sample Location: 04-100

Inspector(s): J. Highstone B. Schlegar Date/Time: 9/5/13 0949

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° F Sunny

Well Data

Diameter of Well Casing: 1 1/2"

Depth to Water Below Top of Casing (feet): 28.32'

Total Depth of Well Below Top of Casing (feet): 34.57 (2013 TO66 9/30/13 inspection)

Purge Method: LOW FLOW PERISTALTIC PUMP

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.25'

Gallons per Foot: 0.10 Gallons in Well: 1.625

Three Times Casing Volume: 1.875 Gallons Purged from Well: 1.5 (SW)

Water Sample Data

Sample Number: 04-100-2013 [04-110-2013 Dup]

Time Sample Collected: ~~1.875~~ (SS) 9/5/13 1106

Sampling Method: LOW FLOW PERISTALTIC PUMP

Remarks (Color/Odor): CLEAR / BIORGANIC ODOR

Stabilized? 3 Casing Volumes Removed?

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1049	6.20	0.635	16.0	0.00	7.37	0.0	-91
.5	1054	6.23	0.620	27.5	0.00	7.12	0.0	-94
1.0	1059	6.25	0.609	27.3	0.00	7.35	0.0	-96
1.5	1104	6.26	0.615	28.4	0.00	7.25	0.0	-96

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: PID: 0.0 AT WELLHEAD, 0.0 BREATHING ZONE

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/5/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: GCI Compound Well No.: 04-201

Inspector(s): J. Highstone B. Schkiger Date/Time: 8/30/13 1522

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F windy cloudy

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" PVC slip cap		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑ NO WATER SAMPLED
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type:	☐	☑

16. Previous well depth: 32.31' (9/3/13 TOSS well inspection). Current well depth: 33.10' *

17. Depth to water: 25.94'

18. PID reading at wellhead: 2.4ppm Breathing Zone: 0.0ppm

Additional notes: *Soft bottom PHOTO TAKEN 1536

✓ 8-31-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: GCI Compound Well No.: 04-202

Inspector(s): J. Highstone B. Schleger Date/Time: 8/30/13 1532

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56° windy overcast partly Sunny

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label. One label incorrect	☐	☑
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly Cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. Light petroleum YES	☑	☑ 8/30/13
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness Trace.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type:	☐	☑

16. Previous well depth: 33.43' 9/3/12 TDSS well inspection. Current well depth: 33.42' *.

17. Depth to water: 26.28'

18. PID reading at wellhead: 29.2ppm Breathing Zone: 0.0 ppm

Additional notes: Left well to breath for 10 minutes
*Hard Bottom
1548 photo taken for photo log

✓ ASF 8/31/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: ~~Area 303~~ GCI Compound SW 9/7/13 Sample Location: 04-202

Inspector(s): E. Roelofs, D. Balmer Date/Time: 9/5/13 1640

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F 5-10mph Mostly Blue Skies

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 26.22

Total Depth of Well Below Top of Casing (feet): 33.42' (8/30/13 Sealaska)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.2

Gallons per Foot: 0.16 Gallons in Well: 1.152

Three Times Casing Volume: 3.46 Gallons Purged from Well: 3.66

Screen
15' - 30'
18' - 33'
Slot Screen
26.22' - 33.42'
Intake
29.8'

Water Sample Data

Sample Number: 04-202-2013

Time Sample Collected: 1750

Sampling Method: low flow peristaltic

Remarks (Color/Odor): Sheen, moderate petroleum

Stabilized? yes 3 Casing Volumes Removed? yes

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1704	5.44	0.140	41.0	3.03	9.10	0.01	-36
0.333	1708	5.94	0.167	42.0	0.33	7.57	0.01	-50
0.666	1712	5.98	0.170	39.2	2.16	7.23	0.01	-59
1.000	1716	6.02	0.165	38.7	1.89	7.17	0.01	-63
1.333	1720	6.06	0.156	37.3	1.42	7.09	0.01	-66
1.666	1724	6.06	0.153	37.9	0.45	7.14	0.01	-66
2.000	1728	6.07	0.150	38.2	0.41	7.11	0.01	-67
2.33	1732	6.08	0.148	15.0	0.03	7.08	0.01	-67
2.66	1736	6.09	0.147	17.8	0.00	7.07	0.01	-68
3.00	1740	6.09	0.146	5.4	0.00	7.04	0.01	-68
3.33	1744	6.10	0.145	3.7	0.00	7.05	0.01	-69
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
~~N/A~~ ER 9/5/13		N/A		N/A				
3.66	1748	6.09	0.145	2.4	0.00	7.02	0.01	-69

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: GCI Compound Well No.: 04-203

Inspector(s): J. Highstone B Schlager Date/Time: 8/30/13 1533

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56° overcast with sun breaks

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" slipcap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: _____	☐	☑

16. Previous well depth: 33.31' Current well depth: 33.32' *
9/3/12 7055 well inspection
17. Depth to water: 26.59'
18. PID reading at wellhead: 7.8 ppm Breathing Zone: 0.0 ppm

Additional notes: Some concrete chipped away at the base [DTP TRACE] Rust colored Debris/MATERIAL ON PROBE + soft bottom
542 PHOTO TAKEN FOR PHOTO LOG

BS
8-31-13

Monitoring Well (Grouudwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: GCI Compound Well No.: 04-204

Inspector(s): J. Highstone B. Schlegel Date/Time: 8/30/13 1527

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F windy overcast w/ sun breaks

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" slip cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. Light Petroleum possibly moderate petroleum	☑	☐
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness ~~Trace~~ 0.01'		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: (3) Bollards	☑	☐

16. Previous well depth: 33.04'. Current well depth: 33.05*.
9/3/12 TCSS well inspection
17. Depth to water: 26.02'
18. PID reading at wellhead: 88.6ppm Breathing Zone: 1.3 ppm

Additional notes: Cable coiled around bollard
Let well breath for 15 minutes
[DTP 26.01] 1554 PHOTO TAKEN FOR Photo Log
*HARD BOTTOM

JBS 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: GCI Compound Sample Location: 04-204

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/6/13 1530

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 48°F 5-10 mph wind overcast

Well Data

Screen 15'-30' gs 18'-33' TC Sat Screen 25.1'-33.05' Intake 29.475

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 25.90'

Total Depth of Well Below Top of Casing (feet): 33.05' (8/30/13 Sealaska)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.15

Gallons per Foot: 0.16 Gallons in Well: 1.144

Three Times Casing Volume: 3.43 Gallons Purged from Well: 1.333

Water Sample Data

Sample Number: 04-204-2013

Time Sample Collected: 1605

Sampling Method: low flow peristaltic

Remarks (Color/Odor): Strong hydrocarbon odor

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1536	5.74	0.227	5.0	0.22	8.91	0.01	6
0.333	1540	5.80	0.233	0.0	0.04	8.15	0.01	-5
0.666	1544	5.82	0.237	0.0	0.00	7.79	0.01	-12
1.000	1548	5.82	0.238	0.0	0.00	7.61	0.01	-16
1.333	1552	5.82	0.239	0.0	0.00	7.55	0.01	-18
~~1.666~~	~~1556~~							
~~2.000~~	~~1600~~							

SLW 9/7/13

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: GCI Compound Well No.: 04-210

Inspector(s): J. Highstone B. Schlager Date/Time: 8/30/13 1606

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57° Sunny w/ breezy conditions

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: 8/30/13 ~~NA~~ (3) 9/16" Bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness Trace.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: (1) bollard	☑	☐

16. Previous well depth: 32.91' Current well depth: 33.05' *
9/3/12 TOSS well inspection
17. Depth to water: 24.96'
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Soft bottom *
1615 ~~1615~~ 8/30/13 PHOTO TAKEN FOR PHOTO LOG

ABF 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: GCI Compound Sample Location: 04-210 !

Inspector(s): E. Roelofs D Balmer Date/Time: 9/5/13 1555

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51° Mostly Blue Skies 5-10mph winds

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 24.88

Total Depth of Well Below Top of Casing (feet): 33.05 (8/30/13 SEALASKA)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.17

Gallons per Foot: 0.16 Gallons in Well: 1.307

Three Times Casing Volume: 3.92 Gallons Purged from Well: 1.000

Screen
23' – 33'
24.88' - 33.05
Intake 29'

Water Sample Data

Sample Number: 04-210-2013

Time Sample Collected: 1625

Sampling Method: low flow peristaltic

Remarks (Color/Odor): Slight rotten odor, colorless

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1612	5.82	0.180	0.0	0.70	7.84	0.01	-34
0.333	1616	5.92	0.180	0.0	0.00	7.45	0.01	-39
0.666	1620	5.92	0.183	0.0	0.00	7.21	0.01	-43
1.000	1624	5.93	0.180	0.0	0.00	7.09	0.01	-45
SLW 9/7/13 ~~1.333~~	~~1628~~							
~~1.666~~	~~1632~~							
~~2.000~~	~~1636~~							
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW
9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: GCI Compound Well No.: 04-213

Inspector(s): J. Highstone B. Schlager Date/Time: 8/30/13 1618

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F sunny with breeze

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" PVC w/ butterfly cap		
5. Specify size and number of bolts on flush-mount cap: ~~4~~ (3) 9/16" bolts 8/30/13		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: (1) Bollard	☑	☐

16. Previous well depth: 29.92' (9/3/12 TOSS well inspection). Current well depth: 29.95' *

17. Depth to water: 24.06'

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes: Let the well breath 10 minutes
Hard bottom
1634 - PHOTO TAKEN FOR PHOTO LOG
2 of the 9/16" bolts stripped

BF 8-3-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: GCI Compound Sample Location: 04-213

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/5/13 1500

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F Slight breeze Mostly blue skies

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 24.00'

Total Depth of Well Below Top of Casing (feet): 29.95' (8/30/13 Sealaska)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): SLW 9/7/13 ~~6~~ 5.95

Gallons per Foot: 0.16 Gallons in Well: ~~.96~~ 0.95 SLW 9/7/13

Three Times Casing Volume: ~~2.88~~ 2.86 SLW 9/7/13 Gallons Purged from Well: 1.33

Screen 20'-30'

24'-30

Intake 27'

Water Sample Data

Sample Number: 04-213

Time Sample Collected: 1535

Sampling Method: low flow peristaltic

Remarks (Color/Odor): Moderate rotten odor, colorless

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1518	5.90	0.141	0.0	0.44	9.30	0.01	-42
0.333	1522	5.91	0.150	0.0	0.00	8.40	0.01	-45
0.666	1526	5.91	0.152	0.0	0.00	7.79	0.01	-49
1.000	1530	5.90	0.151	0.0	0.00	7.64	0.01	-51
1.333	1534	5.90	0.152	0.0	0.00	7.55	0.01	-53
SLW 9/7/13 ~~1.666~~	~~1538~~							

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: GCI Compound Well No.: 04-701

Inspector(s): J. Highstone B. Schlegel Date/Time: 8/30/13 1507

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F cloudy light breeze

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" PVC		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: (4) Bollards	☑	☐

16. Previous well depth: 21.30' (9/3/12 TOSS well inspection). Current well depth: 21.60'.

17. Depth to water: 14.31'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm LCG @ 8/30/13

Additional notes: PHOTO TAKEN FOR PHOTO ~~LAB~~ 1513

VAF 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: GCI Compound Sample Location: 04-701

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/5/13 1400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F Sunny Slight breeze

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 14.20'

Total Depth of Well Below Top of Casing (feet): 21.60 (8-30-13 Sealaska)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.4

Gallons per Foot: 0.16 Gallons in Well: 1.184

Three Times Casing Volume: 3.55 Gallons Purged from Well: 1.666

Screen
7.75'-17.75'
10.75'-20.75'
14.2'-21.60
Intake 17.9

Water Sample Data

Sample Number: 04-701-2013

Time Sample Collected: ~~04-701-2013~~ E.R. 9/5/13 1442

Sampling Method: low flow peristaltic

Remarks (Color/Odor): Colorless, Odorless

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1420	5.73	0.120	0.0	1.54	11.09	0.01	66
0.333	1424	5.84	0.118	0.0	0.41	10.31	0.01	50
0.666	1428	5.84	0.114	0.0	0.13	9.71	0.01	48
1.000	1432	5.83	0.113	0.0	0.00	9.42	0.01	48
1.333	1436	5.82	0.115	0.0	0.00	9.19	0.01	47
1.666	1440	5.81	0.115	0.0	0.00	9.07	0.01	46
~~2.000~~	~~1444~~							

SLW 9/7/13

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Arctic Acres Housing Area Well No.: 03-4116

Inspector(s): A. Lewis R. Boyd Date/Time: 8/30/13 1550

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F, 10 mph winds S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" PVC Slip cap		
5. Specify size and number of bolts on flush-mount cap: 3 x 9/16"		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type:	☐	☒

16. Previous well depth: 30.09 ft btoc (2011). Current well depth: 30.17 ft btoc 8/30/13 (5cft bottom)

17. Depth to water: 19.90 ft btoc (8/30/13)

18. PID reading at wellhead: 9.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ BF 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Artic Acres Sample Location: 03-416

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/31/13 0940

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Raining 53°F No wind

Well Data

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 19.92'

Total Depth of Well Below Top of Casing (feet): 30.17'

Purge Method: low flow peristaltic, intake at 25.05,

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 10.25

Gallons per Foot: 0.16 Gallons in Well: 1.64

Three Times Casing Volume: 4.92 Gallons Purged from Well: 1.33

Water Sample Data

Sample Number: 03-416-2013

Time Sample Collected: 0940

Sampling Method: low flow peristaltic

Remarks (Color/Odor): None Clear colorless no odor no sheen

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0916	5.68	0.189	0.4	0.36	9.07	0.01	-59
.333	0920	5.90	0.190	0.0	0.00	8.29	0.01	-70
.666	0924	5.91	0.191	0.0	0.00	8.14	0.01	-74
1.000	0928	5.90	0.191	0.3	0.00	7.94	0.01	-76
1.333	0932	5.89	0.191	0.3	0.00	7.82	0.01	-77
~~1.666~~	~~0936~~							
~~2.00~~	~~0940~~							

SW 9/1/13

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Top of screen 15'
Screen 15' - 30.17'
water sat screen 19.92' - 30.17'
Intake 25.05

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

DW 9/1/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Arctic Acres Housing Area Well No.: 03-420

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/13 1430

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F, 5 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: 3 X 9/16"		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: None	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type:	☐	☒

16. Previous well depth: 28.33 ft btoc (2011). Current well depth: 28.35 ft btoc (soft bottom)

17. Depth to water: 23.06 ft btoc (SW) 9/10/13

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ RBF 8.31.13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Arctic Acres Housing Area Sample Location: 03-420

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/13 1430

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F, 5 mph wind S

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 23.06

Total Depth of Well Below Top of Casing (feet): 28.33 (2011) 28.35 (soft bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.27

Gallons per Foot: 0.16 Gallons in Well: 0.84

Three Times Casing Volume: 2.53 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 03-420-2013

Time Sample Collected: 1510

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): orange particulate seen at initial purge, clear water

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	1445	6.14	0.215	5	1.51	8.36	0.00	37
0.5	1450	6.05	0.214	Ø	0.24	7.77	0.00	36
1.0	1455	6.05	0.215	Ø	0.00	7.55	0.00	35
1.5	1500	6.05	0.216	Ø	0.00	7.42	0.00	30
2.0	1505	6.05	0.216	Ø	0.00	7.40	0.00	27

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

8-31-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Arctic Acres Housing Area Well No.: 03-421

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/13 1530

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F, 10 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" PVC Slipcap		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. None	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 28.12 ft btoc (2011). Current well depth: 28.14 ft btoc (medium bottom) 8/30/13

17. Depth to water: 23.05 ft btoc 8/30/13

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

ASF
8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Arctic Acres Sample Location: 03-421

Inspector(s): E. Roelofs/D. Balmer Date/Time: 8/31/13 1150, 1200

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 51°F no rain slight breeze

Well Data

Screen 15.75'-26.00'

19'-28.1

23.00-28.1

Intake 25.58'

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 23.06'

Total Depth of Well Below Top of Casing (feet): 28.14'

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan: SW 9/1/13

Length of Water Column in Well (feet): ~~5.04'~~ 5.08'

Gallons per Foot: .16 Gallons in Well: ~~0.806~~ 0.813 SW 9/1/13

Three Times Casing Volume: ~~2.419~~ 2.44 SW 9/1/13 Gallons Purged from Well: 1.66

Water Sample Data

Sample Number: 03-421-2013, 03-431-2013 Duplicate

Time Sample Collected: 1150, 1200

Sampling Method: low flow parastaltic

Remarks (Color/Odor): Hydrocarbon odor, slight. Colorless

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1128	5.80	0.278	0.8	0.00	9.62	0.01	-22
.333	1132	5.79	0.286	0.0	0.00	8.82	0.01	-35
.666	1136	5.80	0.293	0.0	0.00	8.67	0.01	-44
1.000	1140	5.82	0.296	0.0	0.00	8.55	0.01	-51
1.333	1144	5.84	0.298	0.0	0.00	8.52	0.01	-57
1.666	1148	5.85	0.299	0.0	0.00	8.53	0.01	-60

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/1/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Arctic Acres Housing Area Well No.: 03-890

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/13 1610

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56.5°F, Sun, Southern Sunshine

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: light smell of petroleum	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 31.61 ft btoc (2011). Current well depth: 31.69 ft btoc (soft bottom)

17. Depth to water: 23.90 ft btoc (8/30/13)

18. PID reading at wellhead: 80.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Artic Acres Sample Location: 03-890

Inspector(s): E. Reiolts / D. Balmer Date/Time: 8/31-/13 1050

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain 51°F 5-10mph wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 23.90

Total Depth of Well Below Top of Casing (feet): 31.69'

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.79

Gallons per Foot: 0.16 Gallons in Well: 1.246

Three Times Casing Volume: 3.74 Gallons Purged from Well: 1.333

Screen 18'-28' 21'-31' 23.9'-31.5' Intake 27.7'

Water Sample Data

Sample Number: 03-890-2013

Time Sample Collected: 1050

Sampling Method: low flow parastaltic

Remarks (Color/Odor): Slight indescribable color, orange tinge, slight hydrocarbon odor

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1026	5.82	0.343	52.2	1.53	8.98	0.02	-55
.333	1030	5.78	0.350	51.0	0.14	8.71	0.02	-73
.666	1034	5.77	0.355	49.9	0.00	8.72	0.02	-80
1.000	1038	5.77	0.358	49.0	0.00	8.80	0.02	-85
1.333	1042	5.77	0.361	50.1	0.00	8.80	0.02	-89
~~1.666~~	~~1046~~	SLW 9/1/13						

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/1/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-300

Inspector(s): T Hughstone B. Schlegel Date/Time: 8/31/13 1035

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F windy and RAIN

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Moderate Petroleum ODOR	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.44'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: (3) Bollards	☒	☐

16. Previous well depth: 12.55' (TO 55 8/28/12 well inspection). Current well depth: 12.56'.

17. Depth to water: 10.22'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: Sock Removed from the well
[DTP 9.83'] Hard Bottom
1042 - Photo taken for Photo Log

BF 8-31-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-301

Inspector(s): A. Lewis, R. Bayd Date/Time: 8/31/13 1440

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, 20 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" pvc slip cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 19.53 ft btoc (2012) Current well depth: 19.53 ft btoc (solid bottom)

17. Depth to water: 12.30 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

JW
9/1/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-451

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/13 1340

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, light rain, 15 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness trace (< 0.01 ft)		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 21.12 ft btoc (2012). Current well depth: 21.15 ft btoc (soft bottom)

17. Depth to water: 8.51 ft btoc

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes:

SW
9/1/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: NMCB Sample Location: 02-451

Inspector(s): E. Roelofs D. Balmer Date/Time: 09/03/13 1132

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Mostly sunny 20-30 mph wind 43°F

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 8.30'

Total Depth of Well Below Top of Casing (feet): 21.15'

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 12.85

Gallons per Foot: 0.16 Gallons in Well: 2.056

Three Times Casing Volume: 6.168 Gallons Purged from Well: 1.666

Screen
4.3' - 19.3
7.3' - 21.5
8.30 - 21.5'
Intake 19.9'

Water Sample Data

Sample Number: 02-451-2013 MSMSD GRO(AK101)

Time Sample Collected: 1132

Sampling Method: low flow parastaltic

Remarks (Color/Odor): No color, no odor, no sheen

Stabilized? Yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1110	6.04	0.884	0.0	3.25	8.86	0.04	56
.333	1114	6.21	0.907	0.0	2.67	8.68	0.04	76
.666	1118	6.25	0.908	0.0	2.66	8.73	0.04	91
1.000	1122	6.27	0.908	0.0	2.72	8.81	0.04	99
1.333	1126	6.27	0.903	0.0	2.73	8.85	0.04	103
1.666	1130	6.28	0.901	0.0	2.72	8.86	0.04	107

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

JW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-452

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/13 1408

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, light rain, 15 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards (2012)	☒	☐

16. Previous well depth: 20.10 ft btoc. Current well depth: 20.11 ft btoc (solid bottom)

17. Depth to water: 9.32 ft btoc

18. PID reading at wellhead: 0.1 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW
8/31/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-453

Inspector(s): E. Ruelofs / D. Balmer Date/Time: 8/31/13 1403

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 5-10mph wind

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap:		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water? NA	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 2 bollards	☒	☐

16. Previous well depth: 15.08'. Current well depth: 15.10'.

17. Depth to water: 9.19' TC

18. PID reading at wellhead: 10.3 ppm Breathing Zone: 0.0 ppm

Additional notes:

JW 9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-455

Inspector(s): E. Roelof D Balmer Date/Time: 8/31/13 1529

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F 10-20mph winds overcast drizzle

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap:		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? Collar is corroded but not cracked	☐	☒
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water? N/A	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 2 bollards	☒	☐

16. Previous well depth: 17.90'. Current well depth: 17.85'.

17. Depth to water: 11.53' TC

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes:

SW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-401

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/13 1423

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, 15 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: 2 x 9/16"		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 14.32 ft btoc (2012) Current well depth: 14.33 ft btoc (solid bottom)

17. Depth to water: 6.74 ft btoc

18. PID reading at wellhead: 1400 ppm Breathing Zone: 0-1 ppm

Additional notes: #9 well head has heavy petroleum odor, but water does not.

SW
9/1/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: NMCB Sample Location: O2-461

Inspector(s): E. Roelofs D. Balmer Date/Time: 09/03/13 0940

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 30-40mph wind patchy blue skies 43°F

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 6.41'

Total Depth of Well Below Top of Casing (feet): 14.33'

Purge Method: low flow peristaltic ER 9/03/13

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.92

Gallons per Foot: 0.16 Gallons in Well: 1.267

Three Times Casing Volume: 3.80 Gallons Purged from Well: 1.333

Screen 4'-14'

Water Sample Data

Sample Number: O2-461-2013

Time Sample Collected: 0940

Sampling Method: low flow peristaltic

Remarks (Color/Odor): hydrocarbon odor, colorless

Stabilized? yes 3 Casing Volumes Removed? N/A

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0922	5.78	1.43	2.5	1.92	8.02	0.07	-54
.333	0926	5.90	1.45	2.5	0.28	7.87	0.07	-64
.666	0930	5.92	1.46	2.5	0.00	7.78	0.07	-68
1.000	0934	5.93	1.47	2.6	0.00	7.76	0.07	-70
1.333	0938	5.93	1.48	2.5	0.00	7.73	0.07	-72

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/4/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-463

Inspector(s): E.Roelofs / D.Balmer Date/Time: 8/31/13 1508

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F 10-20 mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap:		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water? N/A	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 2 bollards upright, 1 bollard sliding bent	☒	☐
16. Previous well depth: 15.18'TC. Current well depth: 15.20'TC.		
17. Depth to water: 9.71'TC		
18. PID reading at wellhead: 2.1 ppm Breathing Zone: 0 ppm		

SLW

Additional notes: Photo W

SLW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-478

Inspector(s): J Highstone B. Schlegr Date/Time: 8/31/13 1106

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F Rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Slip Cap		
5. Specify size and number of bolts on flush-mount cap: (3) 9/16" Bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NO	☐	☒

16. Previous well depth: 13.65' (TOC 8/28/13 well inspection). Current well depth: ~~16~~ (RA 8/31/13) 13.65'

17. Depth to water: 7.83'

18. PID reading at wellhead: 0.4 ppm Breathing Zone: 0.0 ppm

Additional notes: Hard Bottom & 20% The well Bolts are stripped
1114- Photo Taken for Photo Log

8-31-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-479

Inspector(s): T. Highstow B. Schlegel Date/Time: 8/31/13 1134

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F windy

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap:		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☐
7. Is the monument in good condition? CRACKED BASE / LOSE / Cracked Collar NO	☐	☒
8. Is the casing in good condition? ~~LOSE~~ (BS) 8/31/13 YES	☒	☒ (PA) 8/31/13
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: (2) Bollards	☒	☐

16. Previous well depth: 19.50' (TOSS 8/28/13 well inspection). Current well depth: 19.57'.

17. Depth to water: 12.78'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: SOFT BOTTOM
02-479 HAS CRACKED MONUMENT COLLAR, CRACKED BASE (CEMENT) AND LOSE MONUMENT
1143 - PHOTO TAKEN FOR PHOTO LOG

BS 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: NMCB Sample Location: 02-479

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/2/13 1000

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain 51°F 30-40 mph wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 9.13'

Total Depth of Well Below Top of Casing (feet): 19.57'

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 10.44'

Gallons per Foot: .16 Gallons in Well: 1.67

Three Times Casing Volume: 5.01 Gallons Purged from Well: 4.333

Screen 7-17

TC 10-20

10-19.57

Intake 14.785'

Water Sample Data

Sample Number: 02-479-2013

Time Sample Collected: 1000

Sampling Method: low flow peristaltic

Remarks (Color/Odor): No odor ~~colorless~~ SR 9/2/13 slight orange slight sheen

Stabilized? yes 3 Casing Volumes Removed? Nine

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0904	5.58	0.239	2.3	6.79	9.50	0.01	197
.333	0908	6.17	0.225	2.2	6.22	9.73	0.01	185
.666	0912	6.35	0.217	2.4	8.10	9.96	0.01	182
1.000	0916	6.35	0.219	3.6	7.96	10.02	0.01	185
1.333	0920	6.25	0.244	3.9	6.08	9.76	0.01	197
1.66	0924	5.92	0.276	3.4	6.65	9.45	0.01	203
2.00	0928	5.88	0.283	3.1	5.16	9.11	0.01	136
2.33	0932	5.95	0.268	3.2	6.40	9.70	0.01	151
2.66	0936	6.03	0.262	3.3	6.62	9.74	0.01	160
3.00	0940	6.11	0.258	3.4	6.88	9.72	0.01	165
3.33	0944	6.17	0.254	3.4	6.89	9.70	0.01	172
TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				
3.66	0948	6.21	0.248	3.5	6.94	9.66	0.01	175
4.00	0952	6.27	0.246	4.3	6.97	9.58	0.01	177
4.33	0956	6.29	0.241	4.8	6.93	9.64	0.01	177

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/4/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-997

Inspector(s): G. Roelofs D Balmer Date/Time: 8/31/13 1425

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast, drizzle 10-20 mph 52°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: 2, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity Strong hydrocarbon odor	☒	☐
10. Is there an oily sheen on the water? N/A	☐	☒ (SW)
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No	☐	☒

16. Previous well depth: 10.67'. Current well depth: 10.70'.

17. Depth to water: 6.69'

18. PID reading at wellhead: 18.7 ppm Breathing Zone: 0.0 ppm

Additional notes: photo Topview 1425

SW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: O2-815

Inspector(s): J. Hightstone B Schlack Date/Time: 8/31/13 1125

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F Windy

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap:		
6. Is there any evidence of tampering with the cap or well casing? NC	☒	☐
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: (3) Bollards	☒	☐

16. Previous well depth: 19.69'. Current well depth: 19.69'.
TOSS 8/28/12 well inspection
17. Depth to water: 13.90'
18. PID reading at wellhead: 2.3ppm Breathing Zone: 0.0ppm

Additional notes: SOCK in well Removed
HARD BOTTOM
1133- PHOTO TAKEN FOR PHOTO LOG

RJ 8/31/13

✓ JF 8.31.13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-816

Inspector(s): J. Highstone B. Schlusa Date/Time: 8/31/13 1056

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54° F Rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: (3) Bollards	☒	☐

16. Previous well depth: 17.31' (TOSS 8/28/13 well inspection). Current well depth: 17.43'.

17. Depth to water: 10.60'

18. PID reading at wellhead: 1.2 ppm Breathing Zone: 0.0 ppm

Additional notes: Hard Bottom

1103 Photo taken at Site for log

JDF 8/31/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-817

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/13 1416

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, light rain, 15 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 17.15 ft btoc (2012) Current well depth: 17.18 ft btoc (solid bottom)

17. Depth to water: 9.95 ft btoc

18. PID reading at wellhead: 7.2 ppm Breathing Zone: 0.0 ppm

Additional notes:

JMW
9/1/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-818

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/13 1353

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, light rain, 15 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: light to moderated petroleum	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness trace (<0.01 ft)		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 16.62 ft btoc (2012) Current well depth: 16.62 ft btoc (solid bottom)

17. Depth to water: 8.98 ft btoc ~~DTP: 8.98 ft btoc~~

18. PID reading at wellhead: 180 ppm Breathing Zone: 0.0 ppm

Additional notes: Sock in well

SW
9/1/12

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: NMCB Sample Location: O2-818

Inspector(s): E. Roelofs / D. Balmer Date/Time: 9/03/13 1040

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F Sunny 20-30 mph winds

Well Data

Screen
4' - 14'
7' - 17'
7 - 16.6'
8.55' - 16.6'
Intake 12.575'

Diameter of Well Casing: 2"
Depth to Water Below Top of Casing (feet): 8.55
Total Depth of Well Below Top of Casing (feet): 16.62
Purge Method: low flow peristaltic
Calculate if well parameters do not stabilize per the work plan:
Length of Water Column in Well (feet): 8.07
Gallons per Foot: 0.16 Gallons in Well: 1.29
Three Times Casing Volume: 3.87 Gallons Purged from Well: 1.00

Water Sample Data

Sample Number: O2-818-2013
Time Sample Collected: 1040
Sampling Method: low flow peristaltic
Remarks (Color/Odor): strong hydrocarbon odor
Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1022	6.33	0.250	0.8	0.61	9.01	0.01	-74
.333	1026	6.30	0.248	0.9	0.00	8.83	0.01	-92
.666	1030	6.31	0.247	0.7	0.00	8.76	0.01	-98
1.000	1034	6.32	0.245	0.7	0.00	8.74	0.01	-102
~~1.333~~	~~1038~~							
~~1.666~~	~~1042~~							

SLW 9/3/13

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: 02-819

Inspector(s): ERoelofs / D. Balmer Date/Time: 8/31/13 1541

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F slight rain 10-20mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: 2, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? water in monument	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Strong hydrocarbon odor	☒	☐
10. Is there an oily sheen on the water? N/A	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No	☐	☒

16. Previous well depth: 14.54' TC. Current well depth: 14.55' TC

17. Depth to water: 7.33' TC

18. PID reading at wellhead: 245 ppm Breathing Zone: 0.0 ppm

Additional notes:

JW 9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: E-201

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/13 1447

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, light rain, 20 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" pvc slip cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 18.87 ft btoc (2012) Current well depth: 18.90 ft btoc (solid bottom)

17. Depth to water: 13.22 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW
9/1/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: NMCB Sample Location: E-201

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/3/13 1100

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 48°, S. wind at 10 mph, clear

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 12.99

Total Depth of Well Below Top of Casing (feet): 18.90 (8/21/13)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.91

Gallons per Foot: 0.16 Gallons in Well: 0.95

Three Times Casing Volume: 2.85 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: E-201-2013

Time Sample Collected: 1150

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): Clear, odorless water

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1124	6.38	0.247	11	2.55	7.70	0.00	-75
.5	1129	6.39	0.250	12	1.84	7.21	0.00	-60
1.0	1134	6.40	0.252	10	1.75	7.15	0.00	-57
1.5	1139	6.40	0.253	10	1.70	7.08	0.00	-55
2.0	1144	6.40	0.254	10	1.66	7.03	0.00	-51

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone: 0.0ppm, Wellhead: 0.0ppm

*Fine black particulate seen at initial purge, not observed at sample collection.

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: NMCB-04

Inspector(s): A Lewis Date/Time: 8/31/13 1458

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, light rain, 20 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" PVC slip cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. Heavy petroleum	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.43 ft.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 18.48 ft btoc (2012) Current well depth: 18.48 ft btoc (solid bottom)

17. Depth to water: 12.25 ft btoc DTP = 11.82 ft btoc

18. PID reading at wellhead: 720 ppm Breathing Zone: 0.0

Additional notes:

~~No sample collected due to DTP < 0.02', see Sampling Deviation Form.~~
SLW 9/1/13

SLW
9/1/12

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: NMCB-07

Inspector(s): A Lewis, R. Boyd Date/Time: 8/31/13 1532

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, light rain, 20 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: heavy Petroleum odor	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.36 ft.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 19.21 ft btoc (2012) Current well depth: 19.20 ft btoc (soft bottom)

17. Depth to water: 9.58 ft btoc OTP: 9.22 ft btoc

18. PID reading at wellhead: 127 ppm Breathing Zone: 0.0 ppm

Additional notes: sock in well

No sample collected due to PT ≥ 0.02'; see Sampling Deviation Form
JW 9/1/13

JW
9/1/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: ~~NWCB~~ NMCB-08 ER 8/31/13

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/31/13 1430

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 52°F 5-10mph wind

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4 in J plug		
5. Specify size and number of bolts on flush-mount cap: 3, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? in middle of puddle but no water inside	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Strong hydrocarbon odor	☒	☐
10. Is there an oily sheen on the water? N/A	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 15.70' TC. Current well depth: 15.70' TC.

17. Depth to water: 5.98' TC

18. PID reading at wellhead: 386 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW

SWJ
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: NMCB-09

Inspector(s): J. Hollistone B. Schlegel Date/Time: 8/31/13 1008

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F RAINING

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 4" BUTTERFLY CAP		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. LIGHT ODOR PETROLEUM DSF 8-31-13	☑	☐
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: (3) Bollards	☑	☐

16. Previous well depth: 18.57 (TAKEN FROM TOSS 8/28/12 WELL INSPECTION CHECKLIST). Current well depth: 18.60'.

17. Depth to water: 9.67'

18. PID reading at wellhead: 1.7 ppm Breathing Zone: 0.0 ppm

Additional notes: Hard bottom

1032 - PHOTO TAKEN FOR PHOTO LOG

DSF 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: NMCB Sample Location: NMCB-09

Inspector(s): E. Ruelofs / D. Balmer Date/Time: 9/3/13 0845

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 30-40 mph 43°f Mostly blue skies, Beautiful sunrise

Well Data

Diameter of Well Casing: 4"

Depth to Water Below Top of Casing (feet): 9.10'

Total Depth of Well Below Top of Casing (feet): 18.60'

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 9.5

Gallons per Foot: 0.65 Gallons in Well: 6.175

Three Times Casing Volume: 18.53 Gallons Purged from Well: 1.000

Screen
4'-16'
7'-18.6'
9.1'-18.6'
Intake 13.85'

Water Sample Data

Sample Number: NMCB-09-2013

Time Sample Collected: 0845

Sampling Method: low flow parastaltic

Remarks (Color/Odor): slight hydrocarbon odor, colorless, no sheen

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0826	6.05	0.346	0.0	0.00	8.72	0.02	-117
.333	0830	6.20	0.346	0.0	0.00	8.41	0.02	-126
.666	0834	6.27	0.347	0.0	0.00	8.19	0.02	-132
1.000	0838	6.29	0.347	0.0	0.00	8.05	0.02	-134
SLW 9/3/13 ~~1.333~~	~~0842~~							
~~1.666~~	~~0846~~							
~~2.000~~	~~0850~~							
~~2.333~~	~~0854~~							

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: NMCB-10

Inspector(s): E. Roelofs / D. Balmer Date/Time: ~~8/30~~ 31/13 1453 GR 8/31/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 10-20 mph winds 52°F, overcast w/ drizzle

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Strong hydrocarbon	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.14'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 2 bollards standing, 1 bollard fallen over	☒	☐

16. Previous well depth: 17.02' TC. Current well depth: 17.00' TC.

17. Depth to water: 10.56' DTP 10.42

18. PID reading at wellhead: 301 ppm Breathing Zone: 0.1 ppm

Additional notes: Removed sock to measure, replaced when finished

No sample collected due to PT ≥ 0.00'; see Sampling Deviation Form. JW 9/3/13

JW 9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: NMCB-11

Inspector(s): J. Hightstone B. Schlager Date/Time: 8/31/13 10:46 (SW)

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°, rain (SW)

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness 0.03'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type (3) bollards	☒	☐

16. Previous well depth: 18.77'. Current well depth: 18.82'.
TOSS ~~8/28/13~~ (RW) 8/5/13 8/28/12 well inspection
17. Depth to water: [9.26']
18. PID reading at wellhead: 3.8 PPM Breathing Zone: 0.0

Additional notes: Soft Bottom
[PTP 9.23']
1053 Photo TAKEN FOR log
No sample collected due to PT ≥ 0.03'; see Sampling Deviation Form.
SLW 9/13/13

8/31/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: NMCB-12

Inspector(s): J Highstone B Schlieger Date/Time: 8/31/13 1117

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. NO BS 8/31/13	☒	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: (4) Bollards	☒	☐

16. Previous well depth: 20.40'. Current well depth: 20.38'.
TOSS 8/28/13 Well inspection
17. Depth to water: 14.18'
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Hole Bottom
1123 - PHOTO TAKEN AT SITE FOR LOG

BS 8-31-13

Sediment Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Sample No.: NL-055-2013 [0955]

Inspector(s): J. HIGGSTONE, B. SCHLEFFER Date/Time: 9-2-13 / 0955

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN/DRIZZLE, WIND 20 MPH

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☐	☒

DARK BROWN SEDIMENT, SILTY, FINE TO COURSE SAND w/ SCATTERED FINE GRAVEL. SMALL PIECES OF SHELL + BARNACLES

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☐	☒
3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒
4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☐	☒
5. Is there vegetation growing in the sediment or nearby? KELP IN SAMPLE LOCATION	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Additional Notes: #6 - SMALL EARTHWORMS IN SAMPLE LOCATION

SAMPLE NL-055-2013 COLLECTED AT 0955

IDENTIFIED WITH PHOTOS FROM 2012 SAMPLING

GARMIN GPS MAP 625

N 51.86024°

W 176.64827°

as recorded on 2012 field form; GPS not used in 2013 at this location.

SW
9/3/13

Seep and Shoreline
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: NMCB Well No.: NA

Inspector(s): J. Hughstone, B Schlager Date/Time: 9/4/13 1010

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F Cloudy overcast light breeze

		Yes	No
1.	Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate.	☐	☑
2.	Is the seep flowing directly into a surface water body? NA	☐	☑
3.	Is this a new seep or a seep that has been previously documented? NA		
4.	Are there any odors? If yes, describe odor and intensity	☐	☑
5.	Is there vegetation growing at the seep location? N.A	☐	☐
6.	Is the shoreline discolored by suspected contamination? If yes, describe appearance, location, and square footage	☐	☑
7.	Is there vegetation growing on the shoreline? Rockweed & Kelp	☑	☐
8.	Is any suspect ordnance found on the shoreline? If yes, describe the location and approximate size and shape, and color without approaching ordnance. Note location on back of form. Secure area. Stop work! Notify Navy CSO immediately!	☐	☑
9.	Was there any other manmade debris (exclude items from off-island activities) found on the shoreline? If yes, describe debris, whether it could be contributing to contamination, and provide number of pieces or square footage of area.	☐	☑

Additional Notes: PHOTOS TAKEN FOR PHOTO LOG

Historical debris of scrap metal pipe observed ~~AND NOTHING FROM OFF SHORE ACTIVITIES OBSERVED.~~ BS 9/4/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: ROICC Well No.: 08-200

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/4/13 / 1325

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, Sun, 15 mph wind N

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3X Bollards	☒	☐

16. Previous well depth: 16.16 ft btoc (2012) Current well depth: 16.17 ft btoc (solid bottom)

17. Depth to water: 4.05 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW
9/5/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: ROICC Sample Location: 08-200

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/4/13 / 1325

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, Sun, 15 mph wind N

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 4.05

Total Depth of Well Below Top of Casing (feet): 16.16 (ftbtoc 2012), 16.17 (solid bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 12.11

Gallons per Foot: 0.16 Gallons in Well: 1.94

Three Times Casing Volume: 5.82 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 08-200-2013

Time Sample Collected: 1400

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): No odors, clear water

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1337	6.43	1.15	Ø	1.82	10.65	0.06	-77
.5	1342	6.47	1.13	Ø	2.73	10.35	0.06	-24
1.0	1347	6.47	1.14	Ø	2.85	10.32	0.06	-29
1.5	1352	6.46	1.14	Ø	2.90	10.29	0.06	-25
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
N/A		N/A		N/A				

Notes: PID Breathing Zone: 0.0 ppm, wellhead: 0.0 ppm

MS/MSD collected -SW 9/5/13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/5/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: ROICC Well No.: 08-202

Inspector(s): A. Lewis, R Boyd Date/Time: 9/4/13 1425

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, Sun, 15 mph wind N

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? light surface rust	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 14.75 ft btoc (2012) Current well depth: 14.77 ft btoc (soft bottom)

17. Depth to water: 2.70 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

JWW
9/7/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: ROICC Sample Location: 08-202

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/13 / 0815

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 48°F, 5mph wind SW, clear

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 2.79

Total Depth of Well Below Top of Casing (feet): 14.77

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 11.98

Gallons per Foot: 0.16 Gallons in Well: 1.92

Three Times Casing Volume: 5.76 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: 08-202-2013

Time Sample Collected: 0900

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): Clear & odorless water

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0833	6.35	0.818	Ø	1.99	7.48	0.04	-81
.5	0838	6.52	0.820	Ø	0.81	7.13	0.04	-111
1.0	0843	6.54	0.823	Ø	0.50	7.00	0.04	-105
1.5	0848	6.54	0.820	Ø	0.52	6.89	0.04	-101
2.0	0853	6.54	0.818	Ø	0.51	6.85	0.04	-100
2.5	0858	6.54	0.820	Ø	0.50	6.94	0.04	-98

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: PID: Breathing zone 0.0 ppm, well head 0.0 ppm

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW
9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Runway 5-23 Well No.: 14-100

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/7/13 0900

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 48°F, 25 mph wind NE, overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" PVC Slipcap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type:	☐	☒

16. Previous well depth: 12.92 ft btoc (2012) Current well depth: 12.92 ft btoc (solid bottom)

17. Depth to water: 2.75 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SLW
9/7/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Runway 5-23 Sample Location: 14-100

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/7/13 0900

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 48°F, 25 mph wind NE, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 2.75

Total Depth of Well Below Top of Casing (feet): 12.92 (2012) 12.92

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 10.17

Gallons per Foot: 0.16 Gallons in Well: 1.63

Three Times Casing Volume: 4.89 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 14-100-2013

Time Sample Collected: 0940

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear & odorless water

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0915	6.33	0.312	13	0.39	9.59	0.01	-21
.5	0920	6.32	0.327	Ø	0.13	9.35	0.01	-24
1.0	0925	6.33	0.330	Ø	0.00	9.19	0.01	-27
1.5	0930	6.33	0.331	Ø	0.00	9.08	0.01	-30
2.0	0935	6.33	0.332	Ø	0.00	9.01	0.01	-31

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: AD Breathing Zone: 0.0 ppm, wellhead: 0.0 ppm

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW
9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SA 79 Well No.: 02-230

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/13 / 1025

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, 5mph winds, Sun

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3x Bollards	☒	☐

16. Previous well depth: 18.93 ft btoc (sediment) Current well depth: 18.94 ft btoc (solid bottom)

17. Depth to water: 11.44 ft btoc.

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW
9/7/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SA 79 Sample Location: 02-230

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/13 / 1025

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, 5 mph wind S, Sun

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 11.44

Total Depth of Well Below Top of Casing (feet): 18.93 (2012) 18.94

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.49

Gallons per Foot: 0.16 Gallons in Well: 1.20

Three Times Casing Volume: 3.60 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 02-230-2013

Time Sample Collected: 1110

Sampling Method: low-flow

Remarks (Color/Odor): Clear odorless water

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1040	6.22	0.574	10	1.40	7.62	0.03	-16
.5	1045	6.20	0.574	Ø	0.33	7.75	0.03	-21
1.0	1050	6.21	0.577	Ø	0.00	7.86	0.03	-27
1.5	1055	6.21	0.575	Ø	0.00	7.92	0.03	-32
2.0	1100	6.22	0.577	Ø	0.00	7.95	0.03	-33

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone 0.0ppm, wellhead: 0.0 ppm

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SA 79 Well No.: 601

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/13 / 1620

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, Sun

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 x Bollards	☒	☐

16. Previous well depth: 18.02 ft btoc (2012). Current well depth: 17.99 ft btoc

17. Depth to water: 11.03 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW
9/7/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SA 79 Sample Location: 601

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/13 / 1620

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, Sun

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 11.03

Total Depth of Well Below Top of Casing (feet): 18.02 (2012) 17.99

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.99

Gallons per Foot: 0.16 Gallons in Well: ~~11.12~~ 1.12 RB 9/5/13

Three Times Casing Volume: 3.36 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 601-2013

Time Sample Collected: 1710

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): Clear odorless water

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1642	6.08	0.317	4	1.80	9.93	0.01	-25
.5	1647	6.08	0.313	Ø	0.00	9.41	0.01	-89
1.0	1652	6.08	0.315	Ø	0.00	9.31	0.01	-85
1.5	1657	6.07	0.317	Ø	0.00	9.20	0.01	-84

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: PID Breathing Zone: 0.0ppm Wellhead: 0.0ppm

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SA79 Well No.: MRP-MW8

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/13 / 0940

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, 5 mph wind S, Clear

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: light smell of sulfer	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: _____	☐	☒

16. Previous well depth: 10.06 ft btoc (2012). Current well depth: 10.10 ft btoc.

17. Depth to water: 10.11 ft btoc

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes:

SW
9/7/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SA79 Sample Location: MRP - MW8

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/13 0940

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, 5mph wind S, clear

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 10.11

Total Depth of Well Below Top of Casing (feet): 16.06 (2012) 16.10

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.95

Gallons per Foot: 0.16 Gallons in Well: 0.95

Three Times Casing Volume: 2.85 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: MRP-MW8-2013 | Dup: MRP-MW18-2013

Time Sample Collected: 1005 | 1010

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear water - smell of light sulfur

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0949	6.29	0.341	5	0.89	6.56	0.02	-60
.5	0954	6.18	0.337	Ø	0.00	6.59	0.02	-50
1.0	0959	6.20	0.335	Ø	0.00	6.57	0.02	-48
1.5	1004	6.20	0.332	Ø	0.00	6.55	0.02	-47

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone: 0.0ppm, wellhead: 0.0ppm

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/7/13

Seep and Shoreline
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SA 79, MAIN ROAD PIPELINE Well No.: NA

Inspector(s): J. Hightstan, A. Franzen, B. Schlegel Date/Time: 8/31/13 0810

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F OVERCAST

		Yes	No
1.	Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate.	☐	☒
2.	Is the seep flowing directly into a surface water body? NA	☐	☒
3.	Is this a new seep or a seep that has been previously documented? NA		
4.	Are there any odors? If yes, describe odor and intensity NA	☐	☒
5.	Is there vegetation growing at the seep location? NA	☐	☒
6.	Is the shoreline discolored by suspected contamination? If yes, describe appearance, location, and square footage	☐	☒
7.	Is there vegetation growing on the shoreline? Rock weed (yes)	☒	☒ (B) 8/31/13
8.	Is any suspect ordnance found on the shoreline? If yes, describe the location and approximate size and shape, and color without approaching ordnance. Note location on back of form. Secure area. Stop work! Notify Navy CSO immediately!	☐	☒
9.	Was there any other manmade debris (exclude items from off-island activities) found on the shoreline? If yes, describe debris, whether it could be contributing to contamination, and provide number of pieces or square footage of area	☐	☒

Additional Notes: NO OILTANKER AT THE PUBLIC DOCK

PHOTOS TAKEN FOR PHOTO LOG

AJF 8-31-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SASC Steam Plant Well No.: 04-155

Inspector(s): C. Roelofs D. Balmer Date/Time: 9/4/13 1405

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F slight breeze partially

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" J Plug		
5. Specify size and number of bolts on flush-mount cap: 3 9/16 one striped		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: moderate hydrocarbon	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.21.		
14. Is the well depth consistent with past depth measurements?	☐	☒ *
15. Are there well protections? Type: No	☐	☒

16. Previous well depth: 25.41' btoc. Current well depth: 20.30' btoc.

17. Depth to water: 16.01

18. PID reading at wellhead: 38.6 ppm Breathing Zone: 0.1 ppm

revisited on 9/6/13 - 0901

Additional notes: DTP 15.80
TEAM 3 [DTB 24.68'] soft bottom & AT ~20' THERE IS A FEELING OF A PVC PIPE GROOVE.

* = Due to well depth inconsistency (per Item #14), the well was revisited by J Highstone & B Schleiger on 9/6/13 0901. Their well depth measurement was more consistent with measurements from prior years (25.21 in 2011 and 25.41 in 2012). It is suspected the measurement on 9/4/13 was due to the meter catching on the side of the well SW 9/7/13.

SW 9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SA 80 Steam Plant Well No.: ~~9/4/13 1426~~ CR 9/9/13 04-157

Inspector(s): E. Ruelas / D. Balmer Date/Time: 9/4/13 1120

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50° 5-10mph wind partial blue skies

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: moderate hydrocarbon smell	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.01.		
14. Is the well depth consistent with past depth measurements?	☐	☒
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 22.21' TOC (Sealaska 2012). Current well depth: 21.2'.

17. Depth to water: 19.51'

18. PID reading at wellhead: 13.0ppm Breathing Zone: 0.0ppm

Additional notes: * has sock

DTP 19.50'

SWS
9/5/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SA 80 Steam Plant Well No.: 04-158

Inspector(s): E. Roelofs / D. Balmer Date/Time: 9/4/13 1348

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F slight breeze partly blue skies

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4 in J plug		
5. Specify size and number of bolts on flush-mount cap: 3, 9/16 bolts Bolts are stripped		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: moderate hydrocarbon	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☐	☒
15. Are there well protections? Type: No	☐	☒

16. Previous well depth: 28.07' btoc. Current well depth: ~~27.7' TC~~ 25.1' TC. * EK 9/4/13

17. Depth to water: 19.71

18. PID reading at wellhead: 10.5ppm Breathing Zone: 0.0 ppm

Additional notes: * soft bottom

Due to well depth inconsistency revisited well on 9/6/13

9/6/13 ~~0931~~ 0913 AT 04-158 ~~DTB 26.20'~~ 9/6/13

DTB 26.33 soft bottom

MEASURED BY J. HIGHSTON & B SCHLEIGER ON 9/6/13 09:13

Screen 10-30

19.71 - 28.07

Intake 23.89

SW 9/17/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SA 80 Steam Plant Sample Location: 04-158

Inspector(s): E. Ruelofs D. Balmer Date/Time: 9/4/13 1450

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 5-10 mph wind partly blue skies

Well Data

Diameter of Well Casing: 4 in

Depth to Water Below Top of Casing (feet): 19.71'

Total Depth of Well Below Top of Casing (feet): 28.07' (Sealaska 2012)

Purge Method: Low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.36

Gallons per Foot: 0.65 Gallons in Well: 5.434

Three Times Casing Volume: 16.30 Gallons Purged from Well: 1.666

Water Sample Data

Sample Number: 04-158-2013

Time Sample Collected: 1520

Sampling Method: low flow peristaltic

Remarks (Color/Odor): moderate hydrocarbon odor, sheen

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1456	5.64	0.296	12.1	2.32	8.26	0.01	-13
.333	1500	5.72	0.295	20.9	0.90	7.70	0.01	-25
.666	1504	5.70	0.292	15.2	0.00	7.54	0.01	-27
1.000	1508	5.68	0.292	20.6	0.00	7.48	0.01	-26
1.333	1512	5.66	0.291	22.0	0.00	7.44	0.01	-25
1.666	1516	5.65	0.291	21.0	0.00	7.49	0.01	-25
~~2.000~~	~~1520~~							
TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

SLW 9/5/13

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/5/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SA90 Steam Plant Well No.: 07-159

Inspector(s): E. Roelofs / D. Delmar Date/Time: 9/9/13 0830

Company: Sealaska Environmental Services, LLC

Weather/Temperature: No wind overcast 50° F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in slip cap		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? Collar ~~era~~ SA 9/9/13 corroded but not cracked	☐	☒ *
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: faint sulfide odor	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 33.44 (Sealaska 2012). Current well depth: 33.40'.

17. Depth to water: 23.55'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: * Monument is in good condition except for the collar

Screen
20' - 30'
23' - 33' TOC
23.55' - 33.44'
Intake 28.495

SW
9/9/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SA 80 Steam Plant Sample Location: 04-159

Inspector(s): E. Roelofs / D. Balmer Date/Time: 9/4/13 1100

Company: Sealaska Environmental Services, LLC

Weather/Temperature: No wind overcast 50° light rain

Well Data

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 23.55'

Total Depth of Well Below Top of Casing (feet): 33.44' (2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 9.89

Gallons per Foot: 0.16 Gallons in Well: 1.58

Three Times Casing Volume: 4.75 Gallons Purged from Well: 1.666

Water Sample Data

Sample Number: 04-159-2013

Time Sample Collected: 1130

Sampling Method: low flow peristaltic

Remarks (Color/Odor): faint stale odor, colorless

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1106	5.84	0.378	0.0	1.33	8.19	0.02	-60
.333	1110	6.07	0.375	0.0	0.00	7.62	0.02	-77
.666	1114	6.16	0.367	0.0	0.00	7.50	0.02	-82
1.000	1118	6.17	0.357	0.0	0.00	7.46	0.02	-84
1.333	1122	6.18	0.352	0.0	0.00	7.52	0.02	-85
1.6666	1126	6.18	0.348	0.0	0.00	7.45	0.02	-86
~~2.000~~	~~1130~~							

SLW 9/5/13

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/5/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SA 80 Steam Plant Well No.: C4-164

Inspector(s): E. Roberts / D Palmer Date/Time: 9/4/13 1145

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F No wind partly sunny

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4in slip cap		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 32.17' TC. Current well depth: 32.20' TC.

17. Depth to water: 32.22' TC

18. PID reading at wellhead: 23.1 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo 5 (1147)

SW
9/5/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SA 80 Steam Plant Well No.: C4-173

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/4/13 1400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50° Slight breeze partially blue skies

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: Gin J plug		
5. Specify size and number of bolts on flush-mount cap: 2, 9/16 bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? lid is cracked, but still in one piece functional	☐	☒
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity moderate hydrocarbon odor	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒ *
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NO	☐	☒

16. Previous well depth: 26.18'. Current well depth: 26.68'.

17. Depth to water: 14.78'

18. PID reading at wellhead: 6.7 ppm Breathing Zone: 0.1 ppm

Additional notes: * has sock in it

12" monument lid — cracked but still in one piece - still functional

SW
9/5/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SA80 Steam Plant Sample Location: 04-173

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/5/13 0820

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F No wind mostly blue skies

Well Data

Screen 6-26

14.78-26.48'

Intake 20.63

Diameter of Well Casing: 6"

Depth to Water Below Top of Casing (feet): 14.78'

Total Depth of Well Below Top of Casing (feet): 26.48' (2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 11.7

Gallons per Foot: 1.46 Gallons in Well: 17.08

Three Times Casing Volume: 51.25 Gallons Purged from Well: 1.000

Water Sample Data

Sample Number: 04-173-2013

Time Sample Collected: 0855

Sampling Method: low flow peristaltic

Remarks (Color/Odor): Strong hydrocarbon odor, colorless

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0840	5.69	0.231	0.0	0.00	6.58	0.01	-56
.333	0844	5.80	0.233	0.0	0.00	6.41	0.01	-68
.666	0848	5.83	0.233	0.0	0.00	6.35	0.01	-73
1.000	0852	5.84	0.233	0.0	0.00	6.29	0.01	-76
SLW 9/5/13 ~~1.333~~	~~0856~~							
~~1.666~~	~~0900~~							

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/5/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SA80 Steam Plant Well No.: SP4-3 ~~X~~ ER 9/5/13

Inspector(s): E. Ruelofs D Balmer Date/Time: 9/4/13 1330

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F partly blue skies 10-15 mph wind

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in slip cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: slight odor when sampled	☒	☒ DKB 9/14/13
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 28.04' TC (Sealaska 2012). Current well depth: 28.00'.

17. Depth to water: 20.40' TC

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes:

Screen
16' - 26'
18' - 28'
20.40' - 28.04' Intake 24.2'
~~Intake~~ 7.64' (water column)
ER 9/5/13

SLW
9/7/13

See WATER SAMPLING LOG For 9/6/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SA80 Sample Location: SP4-3

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/5/13 1000

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F Sunny No wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 20.40' TC

Total Depth of Well Below Top of Casing (feet): 28.04' TC (Sealaska 2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.64'

Gallons per Foot: 0.16 Gallons in Well: 1.222

Three Times Casing Volume: 3.67 Gallons Purged from Well: 1.00

Water Sample Data

Sample Number: SP4-3-2013

Time Sample Collected: 1050

Sampling Method: low flow peristaltic

Remarks (Color/Odor): colorless Slight hydrocarbon odor

Stabilized? ~~yes~~ no SLW 9/5/13 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1030	6.75	0.296	0.0	0.12	7.08	0.01	-80
.333	1034	6.25	0.284	0.0	0.00	7.03	0.01	-76
.666	1038	6.11	0.282	0.0	0.00	7.08	0.01	-75
1.000	1042	6.06	0.277	0.0	0.00	7.21	0.01	-73
SLW 9/5/13 ~~1.333~~	~~1046~~							
~~1.666~~	~~1050~~							

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Well did not stabilize for pH, SLW 9/5/13
Lab instructed to cancel analysis.
Well was resampled on 9/6/13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/5/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SA 80 Steam Plant Sample Location: SP4-3

Inspector(s): E. Rodus D. Balmer Date/Time: 9/6/13 0855

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 42° Blue skies Sunny No wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 20.37'

Total Depth of Well Below Top of Casing (feet): 28.04' (Sealaska 2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.67

Gallons per Foot: 0.16 Gallons in Well: 1.227

Three Times Casing Volume: 3.68 Gallons Purged from Well: 1.333

Water Sample Data

Sample Number: SP4-3-2013

Time Sample Collected: 0945

Sampling Method: low flow peristaltic

Remarks (Color/Odor): colorless slight hydrocarbon odor

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0926	5.78	0.295	0.0	1.02	5.97	0.01	-46
.333	0930	5.86	0.294	0.0	0.07	5.90	0.01	-49
.666	0934	5.88	0.289	0.0	0.00	5.85	0.01	-51
1.000	0938	5.89	0.286	0.0	0.00	5.82	0.01	-52
1.333	0942	5.89	0.285	0.0	0.00	5.86	0.01	-52
SLW 9/7/13 ~~1.666~~	~~0946~~							
~~2.000~~	~~0950~~							

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18-36 Well No.: OZ-23i

Inspector(s): E Ruelofs / D Balmer Date/Time: 8/30/13 0900

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 10-20 mph from W partly Sunny 57°

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Rotten odor, moderate	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 Bollards	☒	☐

16. Previous well depth: 18.55'. Current well depth: 18.60'.

17. Depth to water: btoc 14.32' (Sealaska 2012 DB 9/4/13)

18. PID reading at wellhead: 600.4 ppm Breathing Zone: 0.0 ppm

Additional notes:

Intake

$$\frac{14.32' + 18.55'}{2} = 16.44'$$

4-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: South of Runway 18-36 Sample Location: 02-231

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/30/13 0940, 0950

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 10-20 mph from west Partly Sunny 57°F

Well Data

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 14.32'

Total Depth of Well Below Top of Casing (feet): 18.55' (Sealaska 2012)

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4.23'

Gallons per Foot: 0.16 Gallons in Well: 0.6768

Three Times Casing Volume: 2.03 Gallons Purged from Well: 1.33

Water Sample Data

Sample Number: 02-231-2013, 02-241-2013 DUPLICATE ~~ABF~~ 8-31-13

Time Sample Collected: 0940, 0950

Sampling Method: low flow parastaltic

Remarks (Color/Odor): Rotten odor

Stabilized? yes 3 Casing Volumes Removed? N/A

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0920	5.70	0.371	~~0~~ 0.7	2.42	9.24	0.02	-92
0.333	0924	5.77	0.374	0.0	0.44	8.61	0.02	-101
0.666	0928	5.77	0.371	0.0	0.00	8.56	0.02	-109
1.00	0932	5.75	0.372	0.0	0.00	8.42	0.02	-113
1.33	0936	5.75	0.371	0.0	0.00	8.39	0.02	-115

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

ABF 8-31-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18-36 Well No.: 02-232

Inspector(s): G. Ruelofs / D Balmer Date/Time: 8/30/13 1400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 10-20mph from W Partly sunny 58°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Silight rotten odor	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 24.74'. Current well depth: 24.71'.

17. Depth to water: 16.55'

18. PID reading at wellhead: 29.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

Screen 12' - 22'

15' - 24.74' TC

water 16.55 - 24.74'

Intake 20.65'

8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: South of Runway Sample Location: 02-232

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/30/13 1445

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 10-20 mph from W Partly Sunny 57 °F

Well Data

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 16.55'

Total Depth of Well Below Top of Casing (feet): 24.74' (Sealaska 2012)

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.19'

Gallons per Foot: 0.16 Gallons in Well: 1.31

Three Times Casing Volume: 3.93 Gallons Purged from Well: 1.0

Water Sample Data

Sample Number: 02-232-2013

Time Sample Collected: 1445

Sampling Method: low flow parastaltic

Remarks (Color/Odor): Slight Rotten Odor

Stabilized? yes 3 Casing Volumes Removed? N/A

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1426	5.79	0.396	0.0	0.66	9.98	0.02	-95
0.333	1430	6.10	0.413	0.0	0.00	9.18	0.02	-110
0.666	1434	6.12	0.419	0.0	0.00	8.90	0.02	-114
1.00	1438	6.12	0.422	0.0	0.00	8.98	0.02	-116
1.333	1442							
1.666	1446							

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: MSMSD - BTEX only -JW 9/13/13

BF 8-31-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway Well No.: 18/36-02

Inspector(s): R. Roelofs D. Balmer Date/Time: 8/30/13 1635

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58°F Slight Wind from N Partly sunny

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? old & rusted but functional	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water? N/A	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No	☐	☒

16. Previous well depth: 24.05'. Current well depth: 24.05'.

17. Depth to water: 17.50'

18. PID reading at wellhead: 3.7 ppm Breathing Zone: 0.3 ppm

Additional notes:

✓ 8.31.13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18 36 Well No.: AS-1 + ER 8/30/13

Inspector(s): E. Rackin D. Balmer Date/Time: 8/30/13 1035

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 10-20 mph from W 57°F Partly Sunny

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in slip cap pvc		
5. Specify size and number of bolts on flush-mount cap: 3 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No	☐	☒

16. Previous well depth: 29.25' (see 2012). Current well depth: ~~28.40'~~ ER 8/30/2013 28.80' soft bottom

17. Depth to water: 13.66' TC

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

Intake ER 8/30/13

$$\frac{\cancel{13.66' + 29.25'}}{2} = 21.455'$$

$$\frac{24.6' + 29.25'}{2} = 26.925'$$

✓ 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: South of Runway Sample Location: AS-1

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/30/13 1135

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 10-20 mph from W 57°F Partly Sunny

Well Data

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 13.66'

Total Depth of Well Below Top of Casing (feet): 29.25' (Sealaska 2012)

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): ~~4.05 (screen starts at 24.6')~~ ER 8/30/13 15.59

Gallons per Foot: 0.16 Gallons in Well: ~~0.144~~ ER 8/30/13 2.49

Three Times Casing Volume: ~~2.232~~ ER 8/30/13 7.48 Gallons Purged from Well: 1.33 (purged 0.666 Before realizing intake was wrong)

Water Sample Data

Sample Number: AS-1-2013

Time Sample Collected: 1135

Sampling Method: low flow parastaltic

Remarks (Color/Odor): No odor

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1120	6.22	0.496	0.0	0.00	9.19	0.02	-120
0.333	1124	6.22	0.499	0.0	0.00	8.89	0.02	-122
0.666	1128	6.22	0.499	0.0	0.00	8.81	0.02	-123
1.000	1132							
1.333	1136							
TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: MS/MSD · PAHs (17) only

ASF 8-31-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway Well No.: E-213

Inspector(s): E. Roellen D Balmer Date/Time: 8/30/13 1656

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58°F Partly Sunny

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity Slight petroleum	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.01'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No	☐	☒

16. Previous well depth: 18.10' TC. Current well depth: 18.10' TC.

17. Depth to water: 10.91' TC

18. PID reading at wellhead: 6.4 ppm Breathing Zone: 0.0 ppm

Additional notes: DTP - 10.90'

ASF
8/30/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway Well No.: E-216

Inspector(s): E. Roelofs / D. Baimer Date/Time: 8/30/13 1539

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58°F Partly Sunny Slight Breeze

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity Slight petroleum odor	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.14'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NO	☐	☒

16. Previous well depth: 22.75'. Current well depth: 22.35'. *

17. Depth to water: 16.12' DTP 15.98'

18. PID reading at wellhead: 3.7 ppm Breathing Zone: 0.0 ppm

Additional notes: * PVC cut down during well decommissioning in June 2013

8-31-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway Well No.: E-217

Inspector(s): E. Roelofs / D. Balmer Date/Time: 8/30/13 1630

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58°F 10-20 mph wind partly sunny w/ patches of blue sky

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in Slip cap		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Slight petroleum	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.04.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NO	☐	☒

16. Previous well depth: 22.38' TC. Current well depth: 22.05.

17. Depth to water: 15.63' DTP: 15.59'

18. PID reading at wellhead: 7.9 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ BF 8-31-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway Well No.: RW-18/36-03

Inspector(s): Date/Time: 8/30/13 1530

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58°F Slight breeze partly sunny

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4 in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? cracked collar	☐	☒
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water? N/A	☐	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: ~~3 bo~~ 2 bollards (ER 8/30/13)	☒	☐

16. Previous well depth: 26.01'. Current well depth: 26.10'.

17. Depth to water: 13.59'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

8.5.13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway Well No.: RW-18/30-04

Inspector(s): G. Roelofs / D Balmer Date/Time: 8/30/13 1554

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 10 20 mph wind 58°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4 in J plug ER 8/30/13		
5. Specify size and number of bolts on flush-mount cap: 2, ~~4" bolts~~ 3/4" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: moderate petroleum odor	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.14'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No	☐	☒

16. Previous well depth: 27.16'. Current well depth: 27.20'.

17. Depth to water: 13.59' DTP 13.45'

18. PID reading at wellhead: 32.9 ppm Breathing Zone: 0.1 ppm

Additional notes: flush mount is 0.5 full of water

BF 8-31-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18-36 Well No.: RW-18/36-05

Inspector(s): RB 8/30/13 A. Lewis, B. Boyd Date/Time: 8/30/13 1655

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F, 10 mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
*14. Is the well depth consistent with past depth measurements?	☐	☒
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 19.48 ft btoc (7.12) Current well depth: 16.56 ft btoc

17. Depth to water: 8.93 ft btoc

18. PID reading at wellhead: 0.4 ppm Breathing Zone: 0.0 ppm

Additional notes:

*14. Extreamly soft bottom

SLW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18-36 Well No.: Z3-6

Inspector(s): J Halstone B. Schleger Date/Time: 8/30/13 1657

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F and Sunny light breeze

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap:		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness Trace.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type:	☐	☑

16. Previous well depth: 10.71' Current well depth: 10.65' *
TAKEN FROM 8/27/12 TOSS WELL INSPECTION
17. Depth to water: 7.25'
18. PID reading at wellhead: 0.3ppm Breathing Zone: 0.0ppm

Additional notes: *Hard bottom
1703 PHOTO FOR PHOTO LAB 8/30/13 LOG

8/30/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18-36 Well No.: ZA-2 ~~16~~ SR 8/30/13

Inspector(s): E. Rudkin D. Balmer Date/Time: 8/30/13 1700

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58°F partly sunny 10-20 mph wind

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap:		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? no monument	☐	☐
8. Is the casing in good condition? leaning bent 20° angle BUT OK YES	☒	~~☒~~ BF 8-31-13
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water? N/A	☐	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 14.49'. Current well depth: 14.50'.

17. Depth to water: 12.17'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

BF
✓ 8-31-13

Sediment Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66 1000

Site Name: South of Runway 18-36 Sample No.: NSWSD-2S-2013 [~~0825~~] RB 9/3/13

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/3/13 ~~0816~~ RB 9/3/13 0950

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 47°F, 20mph winds S, ~~partly cloudy~~ RB 9/3/13 clear

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☒	☐

Black sand with sheen, small grain sand with ½"-3/8" rock, sea grass along the rocks at sample location

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☒	☐

Moderate smell of petroleum, before and after sampling

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒

4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☒	☐

sheen seen ½" below surface - light

5. Is there vegetation growing in the sediment or nearby?	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Additional Notes:

#5. = Seagrass along rocks at sample location and shore grass along the high tide.

#6. = inverterbrates seen ~~-sea lice~~ By 9/3/13 sand flea - common along surface and ½" below surface in sediment. Also seen coho, Raven, teal, shore birds.

SWJ 9/3/13

Sediment Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18-36 Sample No.: NSWSD-45-2013 [0900]

Inspector(s): A. Lewis Date/Time: 9/2/2013 0845

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F, ~~15~~ 25 mph wind E, rain

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☐	☒

sediment is grey (top 1/8" light grey), small grain sand with some small 3/8" gravel mixed in. No organic matter in sample - organic matter seen on rocks at waters edge (seaweed)

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☐	☒

No odors observed

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒

old tressels on either side of sample location as documented during previous events,

4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☐	☒

5. Is there vegetation growing in the sediment or nearby?	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Additional Notes:

#5 - grass along shoreline is healthy,

#6 - Salmon and flounder seen, two eagles near sample location, Fowl seen at sample location (2 teal).

SW 9/3/13

Sediment Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18-36 Sample No.: NSWSD-SS-2013 [0930]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/2/13 (0920)

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F, 25 mph wind E, rain

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☒	☐

Black sediment w/ 3/8" - 1/2" Rocks, seaweed along the surface of Rocks; sediment in healthy looking condition. Sediment has medium grain sand p

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☒	☐

Heavy smell of petroleum before and after sampling.

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒

previously documented debris that have a low likelihood of contributing to petroleum contamination.

4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☒	☐

moderate sheen seen along the waters edge after sampling. Photos taken but water is cloudy due to wind activity.

5. Is there vegetation growing in the sediment or nearby?	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Additional Notes:

#5. = Seaweed seen at sample location & grass along the high water line, both appear to be in good condition.

#6. = No insects or invertebrates seen in or on the sediment. Wildlife nearby was observed - one eagle, multiple salmon, two teal, and various shorebirds.

SWJ
9/3/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18-36 Sample No.: NSWSD-7-2013 [09:5]

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/13 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, rain

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☐	☒
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results? .... ☐ ☒

4. If so, describe: Pipeline running over Sweeper Creek ~75ft upstream from sample location which would not likely affect sample results

5. Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage. ☐ ☒

6. Describe the sample (clear, colored, muddy, odors, etc.):

Slightly cloudy tinted water, No odors

7. Is there vegetation growing nearby? ☒ ☐

8. Are there signs of wildlife use nearby (birds, fish, etc.)? salmon, trout, flounder, Sculpin, Eagle, Shore birds ☒ ☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

15 ft wide, 2 ft deep, steady flowing water

8. Is erosion occurring? If yes, describe conditions and severity ☐ ☒

9. Is deposition occurring in the water body? If yes, describe conditions ☐ ☒

Additional Notes:

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: South of Runway 18-36 Sample Location: NSWSD-7

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/13 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53° F, rain

Well Data

Diameter of Well Casing: Surface Water

Depth to Water Below Top of Casing (feet): NA

Total Depth of Well Below Top of Casing (feet): NA

Purge Method: NA

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): NA

Gallons per Foot: NA Gallons in Well: NA

Three Times Casing Volume: NA Gallons Purged from Well: NA

Water Sample Data

Sample Number: NSWSD-7-2013

Time Sample Collected: ~~0945~~ SLW 8/31/13 09:15

Sampling Method: Grab

Remarks (Color/Odor): slightly turbid water, no odors

Stabilized? N/A 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial ~~0910~~ 8/31/13	0910	6.21	0.885	21	7.28	11.40	0.6	133
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
NA		NA		NA				

Notes: MS/MSD - BTEX, DRO, PAHs (17) - SLW 9/1/13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/1/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18-36 Sample No.: NSWSD-8 [0825]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/3/13 / 0816

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 47°, S. wind at 20mph, clear

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☐	☒
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results? ☐ ☒

4. If so, describe: However, during the shoreline inspection, the west canal pump was pumping water into S. Sweeper Cr @ approximately 100 gal/min.

5. Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage. ☐ ☒

6. Describe the sample (clear, colored, muddy, odors, etc.):

Clear odorless water

7. Is there vegetation growing nearby? vegetation along shoreline - healthy condition. ☒ ☐

8. Are there signs of wildlife use nearby (birds, fish, etc.)? Seagull, shorebirds, eagle, coho ☒ ☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

25ft wide x 16" deep strong flowing water

8. Is erosion occurring? If yes, describe conditions and severity ☐ ☒

Retaining wall 25ft down stream is breaking down.

9. Is deposition occurring in the water body? If yes, describe conditions ☐ ☒

Additional Notes: (4) cont. Moderate petroleum odor was noted associated with the pumped water. ASF 9-4-13

SLW
9/3/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: South of Runway 18-36 Sample Location: NSWSD-8

Inspector(s): A. Lewis & R. Boyd Date/Time: 9/3/13 / 0816

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 47°, S wind at 20 mph, clear

Well Data

Diameter of Well Casing: Surface water

Depth to Water Below Top of Casing (feet): N/A

Total Depth of Well Below Top of Casing (feet): N/A

Purge Method: N/A

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): N/A

Gallons per Foot: N/A Gallons in Well: N/A

Three Times Casing Volume: N/A Gallons Purged from Well: N/A

Water Sample Data

Sample Number: NSWSD-8-2013

Time Sample Collected: 0825

Sampling Method: Grab

Remarks (Color/Odor): No odors, clear water

Stabilized? NA 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
~~0820~~ (0) 9/3/13 initial	0820	7.14	3.28	11	7.89	11.82	0.10	141
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW
9/3/13

Seep and Shoreline
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: South of Runway 18-36 Well No.: NA

Inspector(s): T Highstone, A. Franzen B Shelcas Date/Time: 8/31/13 0900

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F RAIN

		Yes	No
1.	Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate. ASF 8-31-13 PRODUCT INTERCEPTOR	☒	☐

1x1' SEEP AT THE GWD OF CULVERT, 5x8' SEEP CLOSE TO SWSD-5 SEDIMENT LOCATION

3'x6' SEEP ON BRIDGE BY PERMISSION OF MOFFETT RD ASF 8-31-13 SWSD-5 BY SEDIMENT LOCATION 8'x8' SHEEN UPSTREAM SIDE OF BRIDGE

2.	Is the seep flowing directly into a surface water body? STAINED OILY SEDIMENT ASF 8-31-13	☒	☐
3.	Is this a new seep or a seep that has been previously documented? NO		
4.	Are there any odors? If yes, describe odor and intensity	☒	☐

MILD TO MODERATE ODOR ALONG SHORELINE AT SEEP LOCATIONS

LIGHT ODOR BY THE MAIN ROAD CROSSING RIVER PIPELINE ASF 8-31-13 ODOR BELOW RW 18 3603 WELL

5.	Is there vegetation growing at the seep location? Rockweed	☒	☐
6.	Is the shoreline discolored by suspected contamination? If yes, describe appearance, location, and square footage	☐	☒

8-31-13 Chuck Jay

BLACK OILY SEDIMENT WITH SHEEN AT ABOVE DESCRIBED LOCATIONS. SHEEN PROMINENT WHEN SEDIMENT DISTURBED.

7.	Is there vegetation growing on the shoreline?	☒	☐
8.	Is any suspect ordnance found on the shoreline? If yes, describe the location and approximate size and shape, and color without approaching ordnance. Note location on back of form. Secure area. Stop work! Notify Navy CSO immediately!	☐	☒

9.	Was there any other manmade debris (exclude items from off-island activities) found on the shoreline? If yes, describe debris, whether it could be contributing to contamination, and provide number of pieces or square footage of area	☐	☒

8-31-13 Chuck Jay

NUMEROUS DEBRIS FOUND IN AND AROUND CREEK BUT SEEN DURING PREVIOUS INSPECTIONS. NOT CONTRIBUTING TO CONTAMINATION.

Additional Notes: PHOTOS TAKEN FOR PHOTO LOG, SEEP LOCATIONS MARKED ON THE MAP. MODERATE PETROLEUM ODOR OBSERVED AT WEST CANAL OUTFALL BUT NO SHEEN OBSERVED.

Chuck Jay 8-31-13

Sediment Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 11, Palisades Landfill Sample No.: 101S-2013 [1115]

Inspector(s): A. Lewis, R. Boyd, S. Wunderlich Date/Time: 9/4/13 1055

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 46°F, partial sun, 5 mph wind N

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☐	☒

Medium brown, silty sediment. Vegetation ~~is~~ 23 9/4/13 in sediment

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☐	☒
3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒
4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☐	☒
5. Is there vegetation growing in the sediment or nearby?	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Additional Notes: #5 Vegetation in and nearby sediment

#6 worm (2)

MS/MSD SW 9/4/13

SW 9/4/13

Sediment Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 11, Palisades Landfill Dup: 112S-2013 [0930] Sample No.: 102S-2013 [0905]

Inspector(s): A. Lewis, R. Boyd, S. Wunderlich Date/Time: 9/4/13 0900

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 46°F, partial sun, 10 mph wind N

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☐	☒

light brown sediment w/ fines intermittent 3/5" gravel. Vegetation in sediment.

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☐	☒
3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☒	☐

Palisades Landfill ~150 ft up gradient from sample location

4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☐	☒
5. Is there vegetation growing in the sediment or nearby?	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Additional Notes: #5 vegetation in sediment & nearby.

#6 worms(2), raven, eagle

SW
9/4/13

Sediment Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 11, Palisades Landfill Sample No.: 035-2013 [0955]

Inspector(s): A. Lewis, R. Boyd, S Wunderlich Date/Time: 9/4/13 0940

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 46°F, partly sunny, 10 mph wind N

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☐	☒

Fine to medium grain sand (very little sediment). Dark grey, with red, white, & black particles.

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☐	☒
3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒
4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☐	☒
5. Is there vegetation growing in the sediment or nearby?	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Additional Notes: #5 seaweed & Kelp nearby

#6 Barnacles nearby

SLW
9/4/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU14, Old Pesticide Storage Well No.: 01-153

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/13 / 1400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F, 10mph wind from west, cloudy w/rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 1½" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3X Bollards	☒	☐

16. Previous well depth: 27.19 ft btoc (2012) Current well depth: 27.20 ft btoc (soft bottom

17. Depth to water: 18.54 ft btoc

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes:

SW
9/17/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 14, Old Pesticide Storage Sample Location: 01-153

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/13 | 1400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F, 10mph wind from west, Cloudy w/ rain

Well Data

Diameter of Well Casing: 1½"

Depth to Water Below Top of Casing (feet): 18.54

Total Depth of Well Below Top of Casing (feet): 27.19 (2012) 27.20 (soft bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.65

Gallons per Foot: 0.10 Gallons in Well: 0.87

Three Times Casing Volume: 2.60 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: 01-153-2013

Time Sample Collected: 1450

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): Clear water w/ orange biofouling in water, no odors observed

Stabilized? NO 3 Casing Volumes Removed? yes

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
* Initial .5	1421	6.14	0.185	24	6.01	7.55	0.00	239
1.0	1426	6.20	0.182	11	5.22	7.21	0.00	240
1.5	1431	6.19	0.182	8	5.02	7.01	0.00	236
2.0	1436	6.18	0.184	11	4.84	6.95	0.00	229
2.5	1441	6.19	0.185	14	4.70	6.92	0.00	227
3.0	1446	6.19	0.185	11	4.59	6.81	0.00	221

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone: 0.0 ppm Wellhead: 0.0 ppm

* Orange particulate seen at initial purge, allowed to purge ≈50 gallons prior to connecting to flow cell and collecting parameters. MS/MSD

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW
9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 14, Old Pesticide Storage Well No.: MW14-5

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/13 / 1530

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 43°F, 20 mph winds from South, cloudy w/ Rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" PVC Slipcap		
5. Specify size and number of bolts on flush-mount cap: 3 x 9/16"		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: light smell of petroleum	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 x Bollards	☒	☐

16. Previous well depth: 23.99 ft btoc (23.92) Current well depth: 23.98 ft btoc

17. Depth to water: 16.02 ft btoc

18. PID reading at wellhead: 152 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 14, Old Pesticide Storage Sample Location: MW14 - 5

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/13 / 1530

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 43°F, 20mph winds from South, cloudy w/ Rain

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 16.02

Total Depth of Well Below Top of Casing (feet): 23.99 (2012) 23.99

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.97

Gallons per Foot: 0.16 Gallons in Well: 1.28

Three Times Casing Volume: 3.84 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: MW14-5-2013

Time Sample Collected: 1630

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear - light smell of petroleum

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1552	5.94	0.147	Ø	1.37	8.31	0.00	37
.5	1557	5.94	0.152	Ø	0.39	8.02	0.00	28
1.0	1602	5.96	0.157	Ø	0.00	7.95	0.00	18
1.5	1607	5.97	0.162	Ø	0.00	7.90	0.00	15
2.0	1612	5.98	0.163	Ø	0.00	7.85	0.00	7
2.5	1617	5.99	0.165	Ø	0.00	7.78	0.00	4
3.0	1622	6.00	0.166	Ø	0.00	7.71	0.00	2

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone: 0.0ppm Wellhead: 152 ppm

MS/MSD on Total & Dissolved Lead only.

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 14, Old Pesticide Storage Well No.: MW15-3

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/13 ; ~~1510~~ RB 9/11/13 1710

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 43°F, 20 mph wind S, overcast w/rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: 2 x 9/16"		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A (RB 9/15/13)		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 4 bollards	☒	☐

16. Previous well depth: 21.57 ft btoc (2012) Current well depth: 21.60 ft btoc (soft bottom

17. Depth to water: 13.54 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW
9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU14, Old Pesticide Storage Well No.: MW15-424

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/13 1740

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 43°F, 20 mph wind S, overcast w/ rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 26.39 ft btoc (2012). Current well depth: ~~25.40~~ 26.40 ft btoc (solid bottom) 9/10/13

17. Depth to water: 18.19 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SLW
9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU17, Power Plant No. 3 Well No.: 05-735

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/6/13 / 1500

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51° F, overcast, 5 mph wind E

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 x Bollards	☒	☐

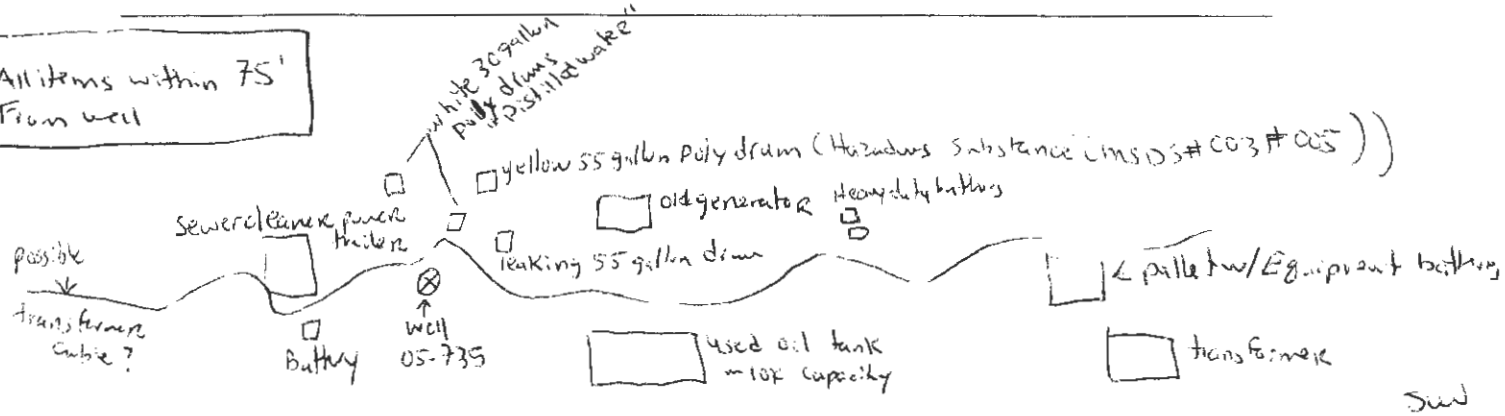
16. Previous well depth: ~~21.80 ft btoc~~ (20.12) Current well depth: 21.80 ft btoc

17. Depth to water: ~~7.38~~ RS 9/6/13 15.84 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

* All items within 75' From well



SWM
9/7/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU17, Power Plant No.3 Sample Location: 05-735

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/6/13 / 1500

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, overcast, 5 mph wind E

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 15.84

Total Depth of Well Below Top of Casing (feet): 21.80 (2012) 21.80

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.96

Gallons per Foot: 0.16 Gallons in Well: 0.95

Three Times Casing Volume: 2.85 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: 05-735-2013 | Dup: 05-745-2013

Time Sample Collected: 1550 | 1600

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear & odorless water

Stabilized? NO 3 Casing Volumes Removed? yes

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1517	6.34	0.290	15	1.21	7.68	0.01	-64
.5	1522	6.37	0.303	11	0.00	7.33	0.01	-79
1.0	1527	6.38	0.300	Ø	0.00	7.21	0.01	-69
1.5	1532	6.37	0.301	Ø	0.00	7.15	0.01	-59
2.0	1537	6.38	0.298	5	0.00	7.11	0.01	-45
2.5	1542	6.39	0.284	Ø	0.00	7.02	0.01	-40
3.0	1547	6.40	0.275	Ø	0.00	6.94	0.01	-32

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone: 0.0 ppm Wellhead: 0.0 ppm

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SWJ 9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 25, Roberts landfill Well No.: A-2

Inspector(s): J. Highstone B. Schleiger Date/Time: 9/9/13 1030

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F clear 15mph winds

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" PVC SLIP CAP		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: N/A	☐	☑

16. Previous well depth: 52.91' Current well depth: 52.90'.
TO39 ~~BS9~~ well inspection 2011
17. Depth to water: 6.46
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: 4 GAS METER CO - 0, H_2S 14, OX 20.9 LEL 0
1211 - PHOTO TAKEN FOR PHOTO LOG

SW
9/10/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 25, Roberts Landfill Sample Location: A-2

Inspector(s): J. Highstone B Schlew Date/Time: 9/9/13 1030

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° F clear and winds 15mph

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 6.46'

Total Depth of Well Below Top of Casing (feet): 52.91' (TO39 well inspection 2011)

Purge Method: Low Flow Peristaltic Pump

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 46.45

Gallons per Foot: 0.16 Gallons in Well: 7.432 gal

Three Times Casing Volume: 22.29 gal Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: A-2-2013 [DUP A-12-2013]

Time Sample Collected: 1136 1146

Sampling Method: Low Flow Peristaltic Pump

Remarks (Color/Odor): CLEAR / NO ODOR

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1104	6.05	0.950	6.6	3.80	7.04	0.0	25
0.5	1109	6.26	0.917	6.2	0.12	6.53	0.0	-21
1.0	1114	6.35	0.901	2.8	0.00	6.36	0.0	-37
1.5	1119	6.39	0.891	2.8	0.00	6.13	0.0	-42
2.0	1124	6.41	0.868	4.3	0.00	6.06	0.0	-39
2.5	1129	6.41	0.860	5.0	0.00	6.06	0.0	-38
3.0	1134	6.42	0.847	6.3	0.00	6.04	0.0	-37

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/10/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SW MU 25 Roberts landfill Well No.: A-3

Inspector(s): J. Highstone B. Schlegar Date/Time: 9/10/13 0830

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° Overcast, Mist

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☐	☑
4. Specify type of cap: MISSING CAP		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type:	☐	☑

16. Previous well depth: 32.49' (TC39 Well Inspection 2011). Current well depth: 32.98'.

17. Depth to water: 28.49'

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0 ppm

Additional notes:

1443 - Photos taken for log book and overview sites shots taken

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 25, Roberts Landfill Sample Location: A-3

Inspector(s): J. Hightstone B. Schlager Date/Time: 9/10/13 0830

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° Cloudy / mist winds 15-20 mph

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 28.49'

Total Depth of Well Below Top of Casing (feet): 32.49' (7039 well inspection 2011)

Purge Method: PERILSTALTIC PUMP LOW FLOW

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4'

Gallons per Foot: 0.16 Gallons in Well: 0.64

Three Times Casing Volume: 1.92 Gallons Purged from Well: 0.875

Water Sample Data

Sample Number: A-3-2013

Time Sample Collected: 0942

Sampling Method: PERILSTALTIC PUMP LOW FLOW

Remarks (Color/Odor): CLEAR/NO ODOR

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	0904	4.78	0.348	35.8	4.84	8.44	0.0	339
0.125	0909	4.67	0.342	35.2	4.53	8.33	0.0	351
0.250	0914	4.60	0.327	33.3	4.37	8.35	0.0	361
0.375	0919	4.56	0.324	29.4	4.23	8.38	0.0	368
0.500	0924	4.53	0.306	29.4	4.08	8.52	0.0	370
0.675	0929	4.55	0.304	26.3	3.93	8.69	0.0	368
0.750	0934	4.56	0.304	24.8	3.93	8.75	0.0	367
0.875	0939	4.57	0.302	24.9	3.92	8.84	0.0	367

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

JW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 25 Roberts landfill Well No.: A-5

Inspector(s): J Hightstone B. Schlieger Date/Time: 9/9/13 1416

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F Sunny w 15mph winds

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" pvc Slip Cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water? NO	☑	☑ BS 9/9/13
11. Is the well dry?	☐	☑
12. Is there product in the well? NO	☑	☑ BS 9/9/13
13. If so, product thickness ~~0.01'~~ (NO, BS 9/9/13)		
14. Is the well depth consistent with past depth measurements? NO *	☑	☑ SW
15. Are there well protections? Type:	☐	☑

16. Previous well depth: 34.73'. Current well depth: 32.75'.
TO39 well inspection 2014
17. Depth to water: 25.57'
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: ~~DTP 25.56'~~ BS 9/9/13

* THE WELL CASING WAS CUT SHORTER DURING 2013 WELL REPAIRS BY ~2'

SLW 9/10/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 25, Roberts Landfill Sample Location: A-5

Inspector(s): S Highstone B. Schleger Date/Time: 9/9/13 1416

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° Sunny w/ 15mph wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 25.57'

Total Depth of Well Below Top of Casing (feet): 34.73' (TO ~~39~~ 1039 well inspection 9/5/11) BS 10/5/13

Purge Method: PERISTALTIC PUMP

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 9.16

Gallons per Foot: 0.16' Gallons in Well: 1.46 gal

Three Times Casing Volume: 4.39 gal Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: A-5-2013

Time Sample Collected: 1730

Sampling Method: LOW FLOW PERISTALTIC PUMP

Remarks (Color/Odor): NO ODOR

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1701	5.61	0.576	35.8	0.85	8.65	0.0	92
0.5	1706	5.60	0.589	41.5	0.00	7.23	0.0	93
1.0	1711	5.63	0.592	49.1	0.00	6.93	0.0	93
1.5	1716	5.62	0.587	63.2	0.00	6.89	0.0	93
2.0	1721	5.62	0.585	64.4	0.00	6.86	0.0	93
2.5	1726	5.61	0.582	60.3	0.00	6.82	0.0	92

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/10/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 25 Roberts Landfill Well No.: B-1

Inspector(s): J. Highstone B. Schlegel Date/Time: 9/9/13 1419

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° Sunny w/ 15mph Breeze

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" PVC Slip Cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: NA	☐	☑

16. Previous well depth: 31.95'. Current well depth: 31.65.

TO 39 9/11/13 ~~TO 66~~ well inspection 9011)

17. Depth to water: 11.35'

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes: CO 0.0, H_2S 0, O_2 20.9, LEL 0.0
1605 - PHOTO TAKEN

SLW
9/10/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 25, Roberts Landfill Sample Location: B-1

Inspector(s): J. Hightstone, B. Schleiger Date/Time: 9/9/13 1419

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F Sunny w/ 15mph winds

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 11.35

Total Depth of Well Below Top of Casing (feet): 31.95' (TO 39 well inspection 2011)

Purge Method: Low flow peristaltic pump

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 20.6

Gallons per Foot: 0.16 Gallons in Well: 3.29

Three Times Casing Volume: 9.88 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: B-1-2013

Time Sample Collected: 1525

Sampling Method: Low flow peristaltic pump

Remarks (Color/Odor): CLEAR/ NO ODOR

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1453	4.67	0.493	18.3	0.21	8.14	0.0	268
0.5	1458	4.45	0.468	17.5	0.00	6.96	0.0	273
1.0	1503	4.34	0.466	20.6	0.00	6.64	0.0	276
1.5	1508	4.31	0.461	19.8	0.00	6.59	0.0	278
2.0	1513	4.30	0.461	33.3	0.00	6.65	0.0	279
2.5	1518	4.27	0.460	31.5	0.00	6.78	0.0	280
3.0	1523	4.27	0.458	31.1	0.00	6.81	0.0	280

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: MS/MSD - VOCs(30), total & dissolved metals (priority pollutant + Al)
-SW 9/10/13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW
9/10/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 25 Roberts Landfill Sample No.: RLSW01-2013 [ ] [ ] swamp

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/9/13 | 0900

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F, Clear, 5 mph wind S

		Yes	No
1.	Is there any sheen or visible contamination on or in the water? No water	☐	☐ N/A
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
3.	Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒
5.	Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage.	☐	☒
7.	Is there vegetation growing nearby?	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)?	☐	☒
8.	Is erosion occurring? If yes, describe conditions and severity	☐	☒
9.	Is deposition occurring in the water body? If yes, describe conditions	☐	☒

4. If so, describe:

6. Describe the sample (clear, colored, muddy, odors, etc.):

No water, no sample collected

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

N/A

Additional Notes: Sample location is dry

SLW
9/10/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66 SW 9/10/13

Site Name: SWMU 25, Roberts Landfill Sample No.: RLSW02-2013[ ]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/9/13 1140

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, 10mph wind from west, Sun

		Yes	No
1.	Is there any sheen or visible contamination on or in the water? ....No water - dry.....	☐	☐ NA
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity.....	☐	☒
3.	Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒
5.	Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage.	☐	☒
7.	Is there vegetation growing nearby? healthy grass around sample location.....	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? Raven.....	☒	☐
8.	Is erosion occurring? If yes, describe conditions and severity.....yes.....	☒	~~☐~~ PB 9/10/13
9.	Is deposition occurring in the water body? If yes, describe conditions	☐	☒

2. Describe:

4. If so, describe:

6. Describe the sample (clear, colored, muddy, odors, etc.):

No water present. N/A

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep: N/A

No water present

*light erosion above sample location on hillside 10'x30'

**See additional notes

Additional Notes: **Road to access sample location has been damaged by erosion running down road. Not possible by a vehicle without 4x4.

Did not collect sample - sample location dry

SW 9/11/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU25, Roberts Landfill Sample No.: Dup: RLSW13-2013 [1445] RLSW03-2013 [1435]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/9/13 / 1415

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F, wind out of the west 5mph, Sun

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☐	☒
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results? .... ☐ ☒

4. If so, describe: Roofing material from building 1827 (approx 10' from sample location) is in water body, but likely not affecting samples.

5. Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage. ..... ☐ ☒

6. Describe the sample (clear, colored, muddy, odors, etc.):

Clear water, some fine orange particulates

7.	Is there vegetation growing nearby?	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? Raven, Eagle	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep: _____

4ft wide X 14 inches deep

8. Is erosion occurring? If yes, describe conditions and severity ..... ☐ ☒

9. Is deposition occurring in the water body? If yes, describe conditions ..... ☐ ☒

Additional Notes: _____

SLW
9/10/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 25, Roberts Landfill Sample Location: RLSW03

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/9/13 / 1420

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F, 5mph wind out of the west, Sun

Well Data

Diameter of Well Casing: NA

Depth to Water Below Top of Casing (feet): NA

Total Depth of Well Below Top of Casing (feet): NA

Purge Method: ~~Low flow~~ (AL 9/9/13) NA

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): NA

Gallons per Foot: NA Gallons in Well: NA

Three Times Casing Volume: NA Gallons Purged from Well: NA

Water Sample Data

Sample Number: RLSW03-2013 | Dup: RLSW13-2013

Time Sample Collected: 1435 | Dup: 1445

Sampling Method: grab

Remarks (Color/Odor): Clear/odorless water

Stabilized? NA 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1430	4.84	0.537	17	7.88	9.51	0.00	210
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
NA		NA		NA				

Notes: Filtered samples collected by peristaltic pump

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW
9/10/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 25 Roberts Landfill Sample No.: RLSW04-2013[1545]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/9/13 / 1525

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F, wind out of the west 5 mph, Sun

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☐	☒
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results? .... ☐ ☒

4. If so, describe: wood outfall (wire wrapped) approximately 125 ft upstream - Flowing, this source is likely not affecting the sample.

5. Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage. ☐ ☒

6. Describe the sample (clear, colored, muddy, odors, etc.):

clear

7.	Is there vegetation growing nearby? Healthy grass & ferns	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? trout, eagle, Raven,	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep: _____

6 ft wide x 3 ft deep - moderate flow

8. Is erosion occurring? If yes, describe conditions and severity ☐ ☒

9. Is deposition occurring in the water body? If yes, describe conditions ☐ ☒

Additional Notes:

SLW
9/10/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 25, Roberts Landfill Sample Location: RLSW04

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/9/13 / 1525

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F, 5mph out of the west, Sun

Well Data

Diameter of Well Casing: Surface Water

Depth to Water Below Top of Casing (feet): NA

Total Depth of Well Below Top of Casing (feet): NA

Purge Method: NA

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): NA

Gallons per Foot: NA Gallons in Well: NA

Three Times Casing Volume: NA Gallons Purged from Well: NA

Water Sample Data

Sample Number: RLSW04 - 2013

Time Sample Collected: 1545

Sampling Method: Grab

Remarks (Color/Odor): Clear & odorless water

Stabilized? NA 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1534	6.21	0.421	5	8.44	10.01	0.00	125

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Filtered sample collected using peristaltic pump

MS/MSD on Alkalinity, Sulfate, TDS & COD, TKN, Ammonia only.

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SWJ
9/10/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU25, Roberts Landfill Sample No.: RLSW05-2013 [1645]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/9/13 / 1625

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F, 10mph western wind, Sun

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☐	☒
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results? ☐ ☒

4. If so, describe:

5. Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage. ☐ ☒

6. Describe the sample (clear, colored, muddy, odors, etc.):

Clear water - odorless

7.	Is there vegetation growing nearby? Grass along shoreline	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? Raven	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

2ft wide x 8 inches deep - good flow

8. Is erosion occurring? If yes, describe conditions and severity ☐ ☒

9. Is deposition occurring in the water body? If yes, describe conditions ☐ ☒

Additional Notes:

SWJ
9/10/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 25, Roberts Landfill Sample Location: RLSW05

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/9/13 / 1625

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F, west wind-10mph, sun

Well Data

Diameter of Well Casing: NA / Surface water

Depth to Water Below Top of Casing (feet): NA

Total Depth of Well Below Top of Casing (feet): NA

Purge Method: NA

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): NA

Gallons per Foot: NA Gallons in Well: NA

Three Times Casing Volume: NA Gallons Purged from Well: NA

Water Sample Data

Sample Number: RLSW05-2013

Time Sample Collected: 1645

Sampling Method: grab

Remarks (Color/Odor): clear & odorless

Stabilized? NA 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1635	6.14	0.250	15	8.21	13.01	0.00	191
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
NA		NA		NA				

Notes: peristaltic pump used for filtering dissolved metals (added by SW per RB 9/10/13)

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/10/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 25 Roberts Landfill Sample No.: NL-11-2013 [0920]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/11 / 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 44°F, 10mph wind from west, overcast

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☐	☒
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results? ☐ ☒

4. If so, describe:

5. Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage. ☐ ☒

6. Describe the sample (clear, colored, muddy, odors, etc.):

Clear odorless water

7.	Is there vegetation growing nearby? grass along shoreline and within stream	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? Eagle	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

14" wide x 6' deep - slow flowing water

10. ~~8.~~	Is erosion occurring? If yes, describe conditions and severity	☐	☒
11. ~~9.~~	Is deposition occurring in the water body? If yes, describe conditions	☐	☒

Additional Notes:

SWW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 25, Roberts Landfill Sample Location: NL-11

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/13 / 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 44°F, 10mph wind west, overcast

Well Data

Diameter of Well Casing: Surface Water

Depth to Water Below Top of Casing (feet): NA

Total Depth of Well Below Top of Casing (feet): NA

Purge Method: NA

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): NA

Gallons per Foot: NA Gallons in Well: NA

Three Times Casing Volume: NA Gallons Purged from Well: NA

Water Sample Data

Sample Number: NL-11-2013

Time Sample Collected: 0920

Sampling Method: Grab

Remarks (Color/Odor): clear odorless water

Stabilized? NA 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0910	6.69	0.384	19	8.71	11.14	0.00	105
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
NA		NA		NA				

Notes: Filtered sample collected for dissolved metals using peristaltic pump. SL

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW
9/13/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 25 Roberts Landfill Sample No.: NL-12-2013 [1010]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/13 / 0950

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 43°F, 10 mph wind from west, overcast w/ mist

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☐	☒
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
3.	Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒
4.	If so, describe:		
5.	Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage.	☐	☒
6.	Describe the sample (clear, colored, muddy, odors, etc.): Clear & odorless water		
7.	Is there vegetation growing nearby? grass along body of water & shoreline - healthy	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? Eagle & Raven	☒	☐
9.	Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep: 7ft wide x 2.5ft deep - heavy flow		
10 ~~8~~.	Is erosion occurring? If yes, describe conditions and severity	☐	☒
11 ~~9~~.	Is deposition occurring in the water body? If yes, describe conditions	☐	☒

Additional Notes:

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 25, Roberts Landfill Sample Location: NL-12

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/13 / 0950

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 43°, 10mph wind W, overcast w/ mist

Well Data

Diameter of Well Casing: Surface Water

Depth to Water Below Top of Casing (feet): NA

Total Depth of Well Below Top of Casing (feet): NA

Purge Method: NA

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): NA

Gallons per Foot: NA Gallons in Well: NA

Three Times Casing Volume: NA Gallons Purged from Well: N

Water Sample Data

Sample Number: NL-12-2013

Time Sample Collected: 1010

Sampling Method: Grab

Remarks (Color/Odor): Clear odorless water

Stabilized? NA 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1000	6.55	0.501	Ø	9.11	11.33	0.00	112
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
NA		NA		NA				

Notes: Filtered sample collected with peristaltic pump

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Summ 25, Roberts landfill Sample No.: NL-14-2013 [1055]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/9/13 / 1030

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, 5-10 mph wind from west, Sun

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☒	☒ RB 9/9/13
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒

No petroleum ~~orders~~ odors at sample location or surrounding areas. RB 9/9/13

3.	Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒

4. If so, describe:

5.	Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage.	☒	☐

4x20 ft section of black discoloring around seep location, milky white fluid lightly flowing from edges of black staining area.

6. Describe the sample (clear, colored, muddy, odors, etc.):

water at sample location clear at surface, some black particle floating in water. Below water surface in water body there is discoloration milky white/orange/light brown staining approx 5'x 75' long

7.	Is there vegetation growing nearby? Not healthy around staining areas	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)?	☐	☒

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

~~SW~~ AL 9/9/13 5 ft wide x 3-4" deep, faint flow at time of sample

8.	Is erosion occurring? If yes, describe conditions and severity	☒	☐

Area above sample location (15 ft up gradient) is eroding - ~~minimally~~ minimally AL 9/9/13 downward.

9.	Is deposition occurring in the water body? If yes, describe conditions	☐	☒

Additional Notes: #5 Concentrated blue-green tinted milky substance seeping from upgradient hillside (~4 ft upgradient from sample location) entering surface water sampling location and diluting to a milky white to milky brown color. Located another blue-green tinted milky substance seep ~20 ft down gradient from NL-14 w/ actively flowing clear water seep ~2 ft away.

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 25, Roberts Landfill Sample Location: NL-14

Inspector(s): A. Lewis, R. Boyd Date/Time: 9-9-13 / 1030

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, 5-10mp wind from west, sun

Well Data

Diameter of Well Casing: Surface water

Depth to Water Below Top of Casing (feet): NA

Total Depth of Well Below Top of Casing (feet): NA

Purge Method: Low flow

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): NA

Gallons per Foot: NA Gallons in Well: NA

Three Times Casing Volume: NA Gallons Purged from Well: NA

Water Sample Data

Sample Number: NL-14-2013

Time Sample Collected: 1055

Sampling Method: Low flow

Remarks (Color/Odor): Clear & odorless water

Stabilized? NA 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	1045	7.69	0.849	9	7.29	9.31	0.00	41
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
NA		NA		NA				

Notes: Filtered sample aliquot for dissolved metals, collected using peristaltic pump (added by SW per RB 9/10/13)

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/10/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 55 Well No.: 55-145

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/11/13 / 1000

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F, 20 mph wind NW, overcast w/ rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3X Bollards	☒	☐

16. Previous well depth: 25.61 ft btoc (2011) Current well depth: 25.61 ft btoc (solid bottom)

17. Depth to water: 16.95 ft btoc

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes:

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 55 Sample Location: 55-145

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/11/13 | 1000

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F, 20 mph wind NW, overcast w/ rain

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 16.95

Total Depth of Well Below Top of Casing (feet): 25.61 (~~2012~~ 2013) 25.61 (solid bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.66

Gallons per Foot: 0.16 Gallons in Well: 1.39

Three Times Casing Volume: 4.17 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 55-145-2013

Time Sample Collected: 1045

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear & odorless water

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1016	6.89	0.238	Ø	6.55	8.15	0.00	131
.5	1021	6.94	0.238	Ø	5.81	7.58	0.00	135
1.0	1026	6.97	0.241	Ø	5.55	7.52	0.00	137
1.5	1031	7.01	0.241	Ø	5.21	7.59	0.00	137
2.0	1036	7.02	0.239	Ø	5.25	7.52	0.00	138

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone: 0.0ppm wellhead: 0.0ppm

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 55 Well No.: 55-146

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/11/13 / 1100

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F, 20 mph wind NW, overcast w/ rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" butterflig		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
*15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 27.91 ft btoc (2011) Current well depth: 27.94 ft btoc (solid bottom)

17. Depth to water: 17.64 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: *#15 One bollard is bent, vehicle likely hit bollard.

SW
9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU60, Tank Farm A Well No.: LC5A

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/13 1300

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F, 5 mph winds

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" PVC slipcap		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: None slight during sampling	☒	☒ DKB 9/15/13
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: None	☐	☒

16. Previous well depth: 12.57 ft btoc (2012) Current well depth: 12.57 ft btoc (medium bottom)

17. Depth to water: 6.95 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ 9.3.13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 60, Tank Farm A Sample Location: RB 8/30/13 ~~LGA5~~ LC5A

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/13 1300

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55° F, 5 mph winds

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 6.95

Total Depth of Well Below Top of Casing (feet): 12.57 (2012) 12.57 (medium bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.62

Gallons per Foot: 0.16 Gallons in Well: 0.90

Three Times Casing Volume: 2.70 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: RB 8/30/13 ~~LGA5-2013~~ LC5A-2013

Time Sample Collected: 1400

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear odorless purge water, A hint of petroleum smell observed at time of readings - 1343 and continued throughout purge.

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	1328	6.61	0.215	Ø	1.84	12.13	0.00	-42
0.5	1333	6.59	0.214	Ø	0.21	11.65	0.00	-27
1.0	1338	6.62	0.213	Ø	0.18	11.45	0.00	-26
1.5	1343	6.63	0.212	Ø	0.00	11.38	0.00	-28
2.0	1348	6.64	0.213	Ø	0.00	11.40	0.00	-30
2.5	1353	6.64	0.213	Ø	0.00	11.38	0.00	-31

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone: 0.0 ppm, wellhead: 0.0 ppm

AB 8-31-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 60, Tank Farm A Well No.: MW-E006

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/13 1045

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F, 5mph wind, S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" PVC slipcap		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. No odors	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type:	☐	☒

16. Previous well depth: 18.42 ft btoc (2012) Current well depth: 18.43 ft btoc (solid bottom)

17. Depth to water: 6.38 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ 15" 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 60, Tank Farm A Sample Location: MW-E006

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/13 1045

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F, 5 mph wind S

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 6.38

Total Depth of Well Below Top of Casing (feet): 18.42 (2012) 18.43 (solid bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 12.04

Gallons per Foot: 0.16 Gallons in Well: 1.93

Three Times Casing Volume: 5.78 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: MW-E006-2013

Time Sample Collected: 1130

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear odorless water

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	1059	6.51	0.317	Ø	0.84	8.78	0.00	1
0.5	1104	6.55	0.314	Ø	0.60	8.91	0.00	-17
1.0	1109	6.56	0.313	Ø	0.00	8.95	0.00	-30
1.5	1114	6.56	0.311	Ø	0.00	8.99	0.00	-34
2.0	1119	6.54	0.310	Ø	0.00	9.02	0.00	-38

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone: 0.0 ppm, wellhead: 0.0 ppm

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

8-31-13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 60, TANK FARM A Well No.: 650

Inspector(s): J. Hollston B. Schleiger Date/Time: 8/30/13 1139

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F sunny partial clouds

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label. Relabel	☐	☑
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" PVC		
5. Specify size and number of bolts on flush-mount cap: (2) 9/16" BOLTS		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type:	☐	☑

16. Previous well depth: 16.32' (FROM well inspection 2012 TOSS). Current well depth: 15.80'.

17. Depth to water: 10.00

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0 ppm

Additional notes: PHOTO TAKEN

JBF 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: ~~Former Power Plant~~ SWMU 60 TANK FARM 17 ~~BL~~ 9/31/13 Sample Location: 650

Inspector(s): J. Hylstone B. Schlegel Date/Time: 8/31/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54° F Cloudy and Raining

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): ~~10.00'~~ BL 8/31/13 9.85'

Total Depth of Well Below Top of Casing (feet): 16.32'

Purge Method: PERISTALTIC PUMP LOW FLOW

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.47'

Gallons per Foot: 0.16 Gallons in Well: 1.03

Three Times Casing Volume: 3.10 Gallons Purged from Well: 3.00

Water Sample Data

Sample Number: 650-2013

Time Sample Collected: 1427

Sampling Method: LOW FLOW PERISTALTIC PUMP

Remarks (Color/Odor): CLEAR/ NO ODOR

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1355	5.88	0.790	28.0	0.00	8.49	0.0	-71
0.50	1400	5.95	0.813	39.4	0.00	8.28	0.0	-81
1.00	1405	6.00	0.879	40.7	0.00	8.23	0.0	-88
1.50	1410	6.06	0.958	42.3	0.00	8.24	0.0	-94
2.00	1415	6.08	0.999	41.6	0.00	8.24	0.0	-96
2.50	1420	6.08	0.999	40.6	0.00	8.54	0.0	-100
3.00	1425	6.12	0.999	39.6	0.00	8.67	0.0	-103

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes:

AB 9-31-13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU60, Tank Farm A Well No.: 651

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/13 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F, light rain, 5mph wind S

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: 2 x 9/16"		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. No odors	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Stainless Steel fence 2ft above surface, 1ft East of well.	☒	☐

16. Previous well depth: 15.29 ft btoc (2012). Current well depth: 14.92 ft btoc (solid bottom)

17. Depth to water: 9.10 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

8/31/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 60, Tank Farm A Sample Location: 651

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/13 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 56°F, light rain, 5 mph wind S

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 9.10

Total Depth of Well Below Top of Casing (feet): 15.29 (2012) 14.92 (solid bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.19

Gallons per Foot: 0.16 Gallons in Well: 0.99

Three Times Casing Volume: 2.97 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: 651-2013

Time Sample Collected: 0945

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): light Red biofouling seen at initial - NO odors

Stabilized? NO 3 Casing Volumes Removed? yes

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	0912	6.14	0.229	30	1.01	10.82	0.01	-70
.5	0917	6.17	0.220	13	0.09	10.01	0.01	-98
1.0	0922	6.20	0.210	5	0.00	9.74	0.01	-55
1.5	0927	6.19	0.205	Ø	0.00	9.75	0.01	-36
2.0	0932	6.19	0.204	Ø	0.00	9.68	0.01	-19
2.5	0937	6.18	0.204	Ø	0.00	9.47	0.01	-8
3.0	0942	6.19	0.204	Ø	0.00	9.42	0.01	-1

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone: 0.0 ppm, wellhead: 0.0 ppm

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

8.31.13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 60 TANK FARM A Well No.: 652

Inspector(s): J Hylistone B. Schlegel Date/Time: 8/30/13 1112

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F Sunny light wind

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly cap		
5. Specify size and number of bolts on flush-mount cap: (2) 9/16" BOLTS		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity Light petroleum ODOR YES	☑	☑ BS 8/30/13
10. Is there an oily sheen on the water?	☑	☐ (DID NOT REMOVE WATER)
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness 0.03'		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: NA	☐	☑

16. Previous well depth: 15.29' (FROM TOSS LTM 9/5/12 WELL INSPECTION). Current well depth: 15.05'.

17. Depth to water: 9.55'

18. PID reading at wellhead: 0.0 PPM Breathing Zone: 0.0 PPM

Additional notes: REMOVED WATER WELL HOUSING
[DTP 9.52'] PRODUCT 0.02 UNABLE TO SAMPLE FROM WELL.
1135 PHOTO TAKEN FOR PHOTO LOG.

BS 8-31-13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SMMU 6 OTANK FARM A Sample Location: 652

Inspector(s): J. Highston Date/Time: 8/30/13 1112

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 57°F Sunny

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 9.55'

Total Depth of Well Below Top of Casing (feet): 15.05' (current Depth did not sample)

Purge Method:

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet):

Gallons per Foot: Gallons in Well:

Three Times Casing Volume: Gallons Purged from Well:

Water Sample Data

Sample Number:

Time Sample Collected:

Sampling Method:

Remarks (Color/Odor):

Stabilized? 3 Casing Volumes Removed?

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: NO SAMPLE AT THIS WELL, PRODUCT THICKNESS IS 0.03'

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

✓ 8-31-13

✓ SLW

Monitoring Well (Gronndwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: 8/31/13 ~~653~~ SWMU 60 TANKFARM A Well No.: 653

Inspector(s): J. Hightstone B. Schleiger Date/Time: 8/30/13 1057

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 59°F OVERCAST WITH Light wind

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐ (DID NOT REMOVE WATER FROM WELL)
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness ~~0.04'~~ 8/30/13 0.05'		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: 3 Bollards (YES)	☑	☑ 8/30/13

16. Previous well depth: 17.45' . Current well depth: 17.45' .
(9/5/12 LTM INSPECTION SEALASKA)
17. Depth to water: 11.79'
18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes: REMOVED ABSORBENT SOCK FROM WELL [DTP 11.74'] PRODUCT OVER 0.02 IN. WILL NOT TAKE SAMPLES FOR LTM.
PHOTO TAKEN AT 1111

ABS 8/31/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 60, TANK FARM A Sample Location: 653

Inspector(s): J. HighStone B. Schlegel Date/Time: 8/30/13 1057

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 59°F OVERCAST LIGHT WIND

(BH) 8/31/13

Well Data

Diameter of Well Casing: ~~11.79~~ 2"

Depth to Water Below Top of Casing (feet): ~~17.45'~~ (9/5/12 LTM INSPECTION SEALASKA) 11.79'

Total Depth of Well Below Top of Casing (feet): 17.45'

Purge Method: LOW FLOW PARISTALTIC PUMP

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet):

Gallons per Foot: Gallons in Well:

Three Times Casing Volume: Gallons Purged from Well:

Water Sample Data

Sample Number: 653-2013

Time Sample Collected:

Sampling Method: LOW FLOW PARISTALTIC PUMP

Remarks (Color/Odor): NO

Stabilized? 3 Casing Volumes Removed?

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
NA		NA		NA				

Notes: DID NOT SAMPLE THIS WELL PRODUCT IN WELL THICKNESS ~~0.04'~~ (BH) 8/30/13 0.05'

8.31.13 BF

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 60, Tank Farm A Sample No.: 852-20B [0925]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/3/13 / 0907

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°, S. wind at 20mph, clear

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☐	☒
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☒	☐

moderate smell of petroleum

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results? ☐ ☒

4. If so, describe: N/A

5. Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage. ☒ ☐

sample collected ~75 down gradient from boom section, orange particulate seen over the surface of sand, mostly along stream. Moderate smell of petroleum without sheening observed, sand below surface is black in color ~ 2" deep

6. Describe the sample (clear, colored, muddy, odors, etc.):

water is slightly cloudy due to wind activity, orange particulate seen floating in water.

7. Is there vegetation growing nearby? Shore grass along banks of waterway ☒ ☐

8. Are there signs of wildlife use nearby (birds, fish, etc.)? cone, seal, seagull, teal, shore birds ☒ ☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep: _____

10ft accross, approx 12" deep,

8. Is erosion occurring? If yes, describe conditions and severity ☐ ☒

9. Is deposition occurring in the water body? If yes, describe conditions ☐ ☒

Additional Notes: Sample location was moved ~75 down gradient due to no flowing water (approx ½" deep), Approximate location was sampled 8/23/12,

SWD
9/3/12

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 60 Tank Farm A Sample Location: 852

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/3/13 / 0907

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°, S. wind at 20mph, clear

Well Data

Diameter of Well Casing: Surface Water

Depth to Water Below Top of Casing (feet): NA

Total Depth of Well Below Top of Casing (feet): NA

Purge Method: NA

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): NA

Gallons per Foot: NA Gallons in Well: NA

Three Times Casing Volume: NA Gallons Purged from Well: NA

Water Sample Data

Sample Number: 852-2013

Time Sample Collected: 0925

Sampling Method: Grab

Remarks (Color/Odor): moderate smell of petroleum

Stabilized? N/A 3 Casing Volumes Removed? N/A

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	0915	5.89	6.55	23	6.42	10.02	0.21	-101
TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW
9/3/13

Sediment Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 60 Tank Farm A Dup: 8628-2013 [1055] Sample No.: 8528-2013 [1045]

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/13 1030

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, rain

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☒	☐

Small grain sand with light organic matter on surface, Top 3/8" of sediment is light brown (fine surface of orange), then dark black material below.

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☒	☐

Heavy smell of petroleum at sample location and around sample location ~25ft.

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒

4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☒	☐

Sheen and color change 3/8" deep from light brown to dark black.

5. Is there vegetation growing in the sediment or nearby?	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Additional Notes: #6 = Coho seen ~75' down gradient, 2 Eagles and 1 Raven, along with shorebirds near sample location.

SW
9/1/13

Seep and Shoreline
Visual Inspection Checklist

Project Name: ADAK CTM 2013 Project No.: T066

Site Name: SWMU 60 TANK FARM 4 Well No.: NA

Inspector(s): HIGHSTONE, SCHLEIGER, FRANZE Date/Time: 8-31-13 0825

Company: SEALASKA ENVIRONMENTAL SERVICES, LLC

Weather/Temperature: 54°F CLOUDY LIGHT TO HEAVY RAIN

		Yes	No
1.	Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate.	☒	☐

PETROLEUM SEEP AT BOOM 10 LOCATED ADJACENT AND NORTH OF THE CULVERT. 15' X 5' AREA OF VISIBLE OIL & SHEEN WITH MODERATE TO HEAVY PETROLEUM ODOR. BLACK OILY SEDIMENTS PRESENT.

2.	Is the seep flowing directly into a surface water body?	☒	☐
3.	Is this a new seep or a seep that has been previously documented? PREVIOUSLY NOTED AND MANAGED WITH BOOM		
4.	Are there any odors? If yes, describe odor and intensity	☒	☐

HEAVY TO MODERATE ODOR OF PETROLEUM.

5.	Is there vegetation growing at the seep location? SEAWEED + GRASS	☒	☐
6.	Is the shoreline discolored by suspected contamination? If yes, describe appearance, location, and square footage	☒	☐

BLACK OILY SEDIMENTS AT SEEP THAT RELEASE SHEEN WHEN DISTURBED. A SECOND AREA OF SHEEN 3' X 4' IN AREA NOTED INSIDE AND ADJACENT TO NORTH END OF BOOM 10.

7.	Is there vegetation growing on the shoreline? HEAVY VEGETATION ABOVE TIDE LINE	☒	☐
8.	Is any suspect ordnance found on the shoreline? If yes, describe the location and approximate size and shape, and color without approaching ordnance. Note location on back of form. Secure area. Stop work! Notify Navy CSO immediately!	☐	☒
9.	Was there any other manmade debris (exclude items from off-island activities) found on the shoreline? If yes, describe debris, whether it could be contributing to contamination, and provide number of pieces or square footage of area.	☐	☒

Additional Notes: PHOTOS TAKEN FOR LOG. BOOM APPEARS TO BE CONTAINING SHEEN.

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 61 TANK FARM B Well No.: 14-113 ~~1221~~ 9/6/13

Inspector(s): J. Hughstone B. Schlegier Date/Time: 9/6/13 1221

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST 54°F

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 1 1/2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition? Monument lose leaning	☐	☑
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity Light petroleum odor YES	☑	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness Trace.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: NA	☐	☑

16. Previous well depth: 6.31' Current well depth: 6.33'.
TO 55 2012 well inspection
17. Depth to water: 3.39'
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SLW
9/7/12

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 61 TANK FARM B Sample Location: 14-113

Inspector(s): J. Hughstone B. Schlegel Date/Time: 9/6/13 1221

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 54°F

Well Data

Diameter of Well Casing: 1 1/2"

Depth to Water Below Top of Casing (feet): 3.39'

Total Depth of Well Below Top of Casing (feet): 6.31' (2012)

Purge Method: PERISTALTIC PUMP LOW FLOW

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 2.92

Gallons per Foot: 0.10 Gallons in Well: 0.292

*Three Times Casing Volume: 0.876 Gallons Purged from Well: ~~0.750~~ 0.925gal *

Water Sample Data

Sample Number: 14-113-2013

Time Sample Collected: 1328

Sampling Method: LOW FLOW PERISSTALTIC PUMP

Remarks (Color/Odor): CLEAR / NO ODOR IN WELL BUT BUCKET SMELLS LIGHT PETRO.

Stabilized? NO 3 Casing Volumes Removed? ~~NO~~ YES 9/6/13

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1256	6.42	0.943	54.6	0.75	10.69	0.0	-120
0.125	1301	6.45	0.994	40.8	0.41	10.16	0.0	-117
0.250	1306	6.50	0.989	31.2	0.00	10.16	0.0	-120
0.375	1311	6.54	0.994	30.1	0.00	10.14	0.0	-120
0.500	1316	6.51	0.999	15.9	0.00	10.10	0.0	-121
0.625	1321	6.52	0.999	11.4	0.00	10.01	0.0	-119
* 0.750	1326	6.53	0.999	8.8	0.00	9.93	0.0	-120

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: FLOW RATE: 100 mL/MIN

9/6/13

~~*100~~ 3X CASING VOLUME REMOVED, ~~DUE TO~~ SLOW RECHARGE SW 9/9/13

* ADDED 1/8 OF GAL PRIOR TO INITIAL PARAMETER VALUES AND LET RUN ~2 MIN OF PURGING PRIOR TO SAMPLE COLLECTION (0.05 gal) TOTAL PURGED (0.925 gal)

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Skimpy Gl Well No.: 14-210

Inspector(s): J Highstone B Schleiger Date/Time: 9/6/13 1341

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F OVERCAST

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: ~~1 1/2"~~ BS 9/6/13 1 1/4" SS cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition? Just casing no Monument	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water? no sheen observed in purge water SLW	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well? NO	~~☑~~	☑ BS 9/6/13
13. If so, product thickness ~~TRACE~~. *Biofouling BS 9/11/13		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: NA	☐	☑

16. Previous well depth: 7.49'. Current well depth: 7.22'.
TOSS well inspection 2012
17. Depth to water: 2.76'
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: HARD BOTTOM AT WELL
WELL HAD SLOW RECOVERY RATE
* THE probe showed trace but it came up w/ NO odor and looked like biofouling.

SLW
9/7/12

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 61 Sample Location: 14-210

Inspector(s): J. HIGHSTONE, B. SCHLEIGER Date/Time: 9-6-13 / 1341

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° F CLOUDY W/ SUN BREAKS WIND 15 mPH

Well Data

Diameter of Well Casing: 1 1/4"

Depth to Water Below Top of Casing (feet): 2.76'

Total Depth of Well Below Top of Casing (feet): 7.49' (2012)

Purge Method: PERISTALTIC PUMP

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4.73'

Gallons per Foot: 0.077 Gallons in Well: 0.364

Three Times Casing Volume: 1.09 Gallons Purged from Well: 0.375

Water Sample Data

Sample Number: 14-210-2013

Time Sample Collected:

Sampling Method: LOW FLOW PERISTALTIC PUMP

Remarks (Color/Odor): CLEAR / LIGHT YELLOW - NO ODOR

Stabilized? 3 Casing Volumes Removed?

	Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
	INITIAL	1500	6.46	0.651	37.7	0.89	10.34	0.0	-79
	0.125	1505	6.45	0.612	35.2	0.00	10.10	0.0	-74
1 *	0.250	1510	6.45	0.597	32.1	0.00	10.12	0.0	-68
	RESTART	1525	6.34	0.587	33.1	1.19	11.18	0.0	-58
2 *	0.375	1530	6.33	0.605	29.7	0.04	10.58	0.0	-55
	RESTART	1545	6.28	0.604	24.2	5.80	11.66	0.0	-53
3 *	STOP	1550							
4 *	"	1650							

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

1 * STOPPED AT 1510 TO LET WELL RECHARGE

2 * Notes: STOPPED AT 1530 TO LET WELL RECHARGE

3 * STOPPED AT 1550 - WELL NOT RECHARGING

4 * WAITED UNTIL 1650, WELL NOT RECHARGING, DECISION MADE TO RETURN TO WELL ON 9/7/13 TO SAMPLE, AFTER RECHARGING OVERNIGHT.

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/7/13

 * SEE PAGE 2 OF 2 FOR 9-7-13 SAMPLE DATA

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66 (BS) 9/7/13

Site Name: SWMU 61 TANK FARM B Sample Location: ~~04-210~~ 14-210

Inspector(s): J. Hightstone B. Schleger Date/Time: 9/7/13 0902

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° OVERCAST 35mph Winds

Well Data

Diameter of Well Casing: 1 1/4"

Depth to Water Below Top of Casing (feet): 2.84'

Total Depth of Well Below Top of Casing (feet): 7.49' (2012)

Purge Method: PERISTALTIC PUMP LOW FLOW

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet):

Gallons per Foot: Gallons in Well:

Three Times Casing Volume: Gallons Purged from Well:

See Page 1 of 2

Water Sample Data

(BS) 9/7/13

Sample Number: ~~04~~ 14-210-2013

Time Sample Collected: 0918

Sampling Method: PERISTALTIC PUMP LOW FLOW

Remarks (Color/Odor): (BS) 9/7/13 ~~NO IN~~ light yellow color NO ODOR

Stabilized? ND 3 Casing Volumes Removed? NO

AMOUNT IN FLOWCELL

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
	0917	6.09	0.735	8.4	4.41	9.54	0.0	-58

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: PID 0.0 AT well head and breathing zone
MS/MSD for BTEX only

SLW addition on 9/7/13

- SAMPLED AFTER RECHARGING OVERNIGHT
- WELL HAS HISTORY OF SLOW RECHARGE; NO SAMPLING DEVIATION FORM IS NECESSARY AS SAMPLING PERFORMED IN COMPLIANCE WITH SAP WS # 17 (P.82)

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 61 Well No.: TFB-MW-4B

Inspector(s): E. Roche D. Balmer Date/Time: 9/6/13 1140

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Mostly Blue Skies 45°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in slip cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? Rusty	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity moderate rotten	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No	☐	☒

16. Previous well depth: 29.75' (Sealaska 2012). Current well depth: 29.70'.

17. Depth to water: 4.47'

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes: 1 Photo East (A)

SW
9/7/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 61 Sample Location: TFB-MW-4B

Inspector(s): E. Roelofs / D. Balmer Date/Time: 9/6/13 1150

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Mostly Blue skies 45°F

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 4.47'

Total Depth of Well Below Top of Casing (feet): 29.75' (Sealaska 2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 25.28'

Gallons per Foot: 0.16 Gallons in Well: 4.044

Three Times Casing Volume: 12.13 Gallons Purged from Well: 1.333

Screen 13' - 28'
15' - 30'
Intake 22.5'

Water Sample Data

Sample Number: TFB-MW-4B-2013

Time Sample Collected: 1220

Sampling Method: low flow peristaltic

Remarks (Color/Odor): Moderate Rotten odor, colorless

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1158	6.01	0.262	0.0	1.30	7.30	0.01	-21
.333	1202	6.05	0.268	0.0	0.08	7.12	0.01	-29
.666	1206	6.04	0.270	0.0	0.00	7.05	0.01	-33
1.000	1210	6.04	0.270	0.0	0.00	7.22	0.01	-35
1.333	1214	6.05	0.272	0.0	0.00	7.22	0.01	-38
SW 9/7/13 ~~1.666~~	~~1218~~							
~~2.00~~	~~1222~~							

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/7/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 61 Sample No.: NL-04 [1215]

Inspector(s): A. Lewis, R. Boyd, S. Wunderlich Date/Time: 9/6/13 1205

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, partial sun, 5 mph wind S

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☐	☒
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
3.	Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒
4.	If so, describe: NA		
5.	Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage.	☐	☒
6.	Describe the sample (clear, colored, muddy, odors, etc.): Clear water (bottom of stream visible), no odors		
7.	Is there vegetation growing nearby?	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)?	☒	☐
9.	Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep: 30 ft wide x 4 ft deep, northward flow (likely due to wind from south)		
10. ~~8.~~	Is erosion occurring? If yes, describe conditions and severity	☐	☒
11. ~~9.~~	Is deposition occurring in the water body? If yes, describe conditions	☐	☒

Additional Notes: #7 grass, #8 ravens & eagle,

SW 9/9/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU61 Sample Location: NL-04

Inspector(s): A. Lewis, R. Boyd, S. Wunderlich Date/Time: 9/6/13 1205

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, partial sun, 5 mph wind S

Well Data

Diameter of Well Casing: Surface Water

Depth to Water Below Top of Casing (feet): NA

Total Depth of Well Below Top of Casing (feet): NA

Purge Method: NA

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): NA

Gallons per Foot: NA Gallons in Well: NA

Three Times Casing Volume: NA Gallons Purged from Well: NA

Water Sample Data

Sample Number: NL-04-2013

Time Sample Collected: 1215

Sampling Method: Grab

Remarks (Color/Odor): No odor, clear water

Stabilized? NA 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1210	6.21	0.119	1	7.89	9.98	0.00	82
TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: MS/MSD on GRO only

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/9/13

Sediment Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: Swamulol Sample No.: Dup: NL-145-2013-R [1140] NL-045-2013-R [1120]

Inspector(s): A. Lewis & J Highstone Date/Time: 10/25/13 1100

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 40°, overcast, 10mp NNW wind

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☐	☒

Dark Brown, silty clay with organics (Roots)

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☒	☐

Light smell of petroleum, no sheen seen on sample or in the water way.

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒
4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☐	☒
5. Is there vegetation growing in the sediment or nearby?	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Additional Notes:

#5 grass

#6 worms, raven seen

Seep and Shoreline
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 61 Nearby Locations, Well No.: NL-C4, 14-113

Inspector(s): A. Lewis, R. Boyd, S. Wunderlich Date/Time: 9/6/13 / ~~1205~~ 23°/1/6/13 1310

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, partial sun, 5 mph wind S

		Yes	No
1.	Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate.	☐	☒

Extensive areas of shallow ponded water adjacent to stream

2.	Is the seep flowing directly into a surface water body? NA	☐	☐
3.	Is this a new seep or a seep that has been previously documented? NA		
4.	Are there any odors? If yes, describe odor and intensity	☐	☒
5.	Is there vegetation growing at the seep location? NA	☐	☐
6.	Is the shoreline discolored by suspected contamination? If yes, describe appearance, location, and square footage	☐	☒
7.	Is there vegetation growing on the shoreline? grasses	☒	☐
8.	Is any suspect ordnance found on the shoreline? If yes, describe the location and approximate size and shape, and color without approaching ordnance. Note location on back of form. Secure area. Stop work! Notify Navy CSO immediately!	☐	☒
9.	Was there any other manmade debris (exclude items from off-island activities) found on the shoreline? If yes, describe debris, whether it could be contributing to contamination, and provide number of pieces or square footage of area	☐	☒

Additional Notes: No visible evidence of petroleum contamination observed.

SW
9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: 03-101

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/7/13 1010

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 48° 25-30mph winds overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 26.88'. Current well depth: 26.92'.

17. Depth to water: 22.43'

18. PID reading at wellhead: 37.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo 5 1004

SW 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: 03-102

Inspector(s): G. Rueloos D. Balmer Date/Time: 9/7/13 1048

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 30° F 25-30mph winds

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Spring		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 21.26 (Sealaska 2012). Current well depth: 21.30' btoc.

17. Depth to water: 13.99' btoc

18. PID reading at wellhead: 6.9 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo SW 1048

SW 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: 03-103

Inspector(s): E. Reeves D. Bylund Date/Time: 9/7/13 1042

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50° 25-30 mph winds overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Slip cap		
5. Specify size and number of bolts on flush-mount cap:		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 22.35'. Current well depth: 22.33'.

17. Depth to water: 15.78'

18. PID reading at wellhead: 0.2 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo SW 1042

SWW
9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 52 Sagle Bay Well No.: 03-109

Inspector(s): R. Roelofs D. Balmer Date/Time: 9/7/13 1121

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 25-35 mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" T plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? cracked collar	☐	☒
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NO	☐	☒

16. Previous well depth: 36.74 (2012). Current well depth: 36.80'.

17. Depth to water: 36.03' btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo W 1121

SW
9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: 03-502

Inspector(s): E. Beelo's / D. Balmer Date/Time: 9/7/13 1015

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 48°F 25-30 mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 1/2" slip cap		
5. Specify size and number of bolts on flush-mount cap: 3. 9/16"		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 26.35 (Sealaska 2012). Current well depth: 26.35.

17. Depth to water: 11.10'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo top view 1005

SW
9/9/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Eagle Bay Sample Location: 03-502

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/9/13 1530

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 5-10 mph wind partly sunny, partly blue skies

Well Data

Diameter of Well Casing: 1/2"

Depth to Water Below Top of Casing (feet): 24.40'

Total Depth of Well Below Top of Casing (feet): 26.30' (9/7/13)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 1.9'

Gallons per Foot: 0.02 (per example of 2012 sample log) Gallons in Well: 0.038

Three Times Casing Volume: 0.114 Gallons Purged from Well: 0.125

conservatively used this value

Screen 17.35 - 26.35 gs

Sat Screen 24.40' - 26.30'

Intake 25.4' TC

Water Sample Data

Sample Number: 03-502-2013

Time Sample Collected: 1600

Sampling Method: low flow peristaltic

Remarks (Color/Odor): Slight odor colorless

Stabilized? No 3 Casing Volumes Removed? yes

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
~~Initial~~	~~1545~~							
~~0.125~~								
Initial	1550	5.91	0.146	2.2	0.0	12.76	0.01	-6
0.125	1555	5.80	0.151	2.2	0.0	10.99	0.01	-7

EE 9/9/13

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SWJ 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: 03-898

Inspector(s): E. Roelofs / D. Balmer Date/Time: 9/7/13 0917

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 20-30mph wind rain overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 21.37' btoc (Seaborn 2012) Current well depth: 21.60' btoc.

17. Depth to water: 12.46'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo W 0917

DW 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SNMU 02 Well No.: AMW-704

Inspector(s): E. Rivers D. Bilmer Date/Time: 9/7/13 0900

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 25-30 mph wind overcast 50°F light rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" slip cap		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? Rusted out functional	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Slight hydrocarbon odor while sampling yes	☒	☒ ER 9/9/13
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements? yes	☒	☒ ER 9/7/13
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 16.59' btoc (Sealaska 2012). Current well depth: 16.60' btoc.

17. Depth to water: 6.51' btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo S/N 0350

SW 9/9/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Eagle Bay Sample Location: AMW-704

Inspector(s): E Roelofs D. Balmer Date/Time: 9/9/13 1040

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50° Blue Skies 5-10 mph

Well Data

Screen
4'-14' gs
7'-17' TC
Sat screen
7'-16.6'
Intake
11.8'

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 6.51'

Total Depth of Well Below Top of Casing (feet): 16.6' (9/7/13)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 10.09

Gallons per Foot: 0.16 Gallons in Well: 1.61

Three Times Casing Volume: 4.84 Gallons Purged from Well: 1.66

Water Sample Data

Sample Number: AMW-704-2013

Time Sample Collected: 1125

Sampling Method: low flow peristaltic

Remarks (Color/Odor): colorless, slight hydrocarbon odor

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1102	5.61	0.200	0.0	0.22	8.61	0.01	90
.333	1106	5.65	0.183	0.0	0.00	8.47	0.01	76
.666	1110	5.56	0.148	0.0	0.00	8.47	0.01	86
1.000	1114	5.54	0.137	0.0	0.00	8.48	0.01	88
1.333	1118	5.53	0.135	0.0	0.00	8.51	0.01	88
1.66	1122	5.53	0.136	0.0	0.00	8.54	0.01	87
ER 9/9/13	~~1126~~							

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SWJ 9/12/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Well No.: CTO-124-MW15

Inspector(s): E. Roelofs / D. Balmer Date/Time: 9/7/13 0953

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 25-35 mph winds 50°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" J plug		
5. Specify size and number of bolts on flush-mount cap:		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: slight hydrocarbon odor	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 20.15 btoc (Sept 2012). Current well depth: 20.15 btoc.

17. Depth to water: 17.60'

18. PID reading at wellhead: 65.0 ppm Breathing Zone: 0.0 ppm

Additional notes: well has sock in it

Photo 5 0953

SW 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: HMW-33-3

Inspector(s): E. Reeves / D. Beaver Date/Time: 9/7/13 1111

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 25-30 mph wind 50°F overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? rusty but functional	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: ~~23.5~~ 33.22' (Sealaska 2012) ER 9/7/13. Current well depth: 33.40' btoc.

17. Depth to water: 27.82' btoc

18. PID reading at wellhead: 23.5 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo N 1111

SW 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 102 Eagle Bay Well No.: HMW 303-4

Inspector(s): G. Roelofs D. Balmer Date/Time: 9/9/13 1102

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 25-30 mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? rusty	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 28.63' (Sealaska 2012). Current well depth: 28.65' btoc.

17. Depth to water: 26.17' btoc

18. PID reading at wellhead: 103 ppm Breathing Zone: 3.0 ppm

Additional notes: Photo 5 1102

SW 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: LMW-303-11

Inspector(s): E. Rodeles D. Balmer Date/Time: 9/1/13 1020

Company: Sealaska Environmental Services, LLC

Weather/Temperature:

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 32.05' btoc (Sealaska 2011). Current well depth: 32.30' btoc.

17. Depth to water: 26.60' btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: photo SW 1017

SW 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 02 Eagle Bay Well No.: MW-302-7

Inspector(s): E. Roelofs / D. Bilmon Date/Time: 9/7/13 1157

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 25-30 mph overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Spring		
5. Specify size and number of bolts on flush-mount cap: 3, 9/16 bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity slight hydrocarbon odor when sampling	☒	☒ DKB 9/15/13
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N A	☐	☒

16. Previous well depth: 33.53' (Sealaska 2012). Current well depth: 33.50'.

17. Depth to water: 21.80

18. PID reading at wellhead: 4.2 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo topview 1157

JWJ 9/9/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Eagle Bay Sample Location: MW-303-7

Inspector(s): E. Ruelas D. Balmer Date/Time: 9/9/13 1620

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F Mostly Sunny 5-10 mph winds

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 21.80'

Total Depth of Well Below Top of Casing (feet): 33.50' ~~8~~ EE 9/9/13 (9/7/13)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 11.7

Gallons per Foot: 0.16 Gallons in Well: 1.872

Three Times Casing Volume: 5.6 Gallons Purged from Well: .6666

Screen 18.6' - 33.6' gs
Slot screen 21.8' - 33.5'
Intake 26.65

Water Sample Data

Sample Number: MW-303-7-2013

Time Sample Collected: 1700

Sampling Method: low flow peristaltic

Remarks (Color/Odor): slight hydrocarbon, no color, no sheen

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Intial	1640	5.84	0.297	0.4	0.00	9.10	0.01	-99
.333	1644	5.81	0.298	0.0	0.00	8.68	0.01	-53
.666	1648	5.80	0.301	1.5	0.00	8.60	0.01	-54
~~1.000~~	~~1652~~							
~~1.333~~	~~1656~~							
~~1.666~~	~~1700~~							
TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

EE 9/9/13

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: MW-363-8

Inspector(s): Z. Roelofs D. Balmer Date/Time: 9/7/13 1133

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 25-30 mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Stepcap		
5. Specify size and number of bolts on flush-mount cap: ~~N/A~~ 3, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Slight hydrocarbon odor	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry? No	☒	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.08.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 29.23' (previous zone). Current well depth: 29.25' btoc.

17. Depth to water: 23.00'

18. PID reading at wellhead: 1.7 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo taken 1133

DTP 22.92'

SWJ
9/7/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Well No.: MW-303-12

Inspector(s): P. Roelofs D. Balmer Date/Time: 9/7/13 1141

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 25-30mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" J plug		
5. Specify size and number of bolts on flush-mount cap: 3, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? flush-mount has 2 stripped bolts	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 31.95' (Sealaska 2012). Current well depth: 31.33' bltc.

17. Depth to water: 21.51'

18. PID reading at wellhead: 9.4 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo topview 1141

new stick in well

SWJ 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: RW-303-4

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/7/13 1148

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50° F 35-30 mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 8" J plug		
5. Specify size and number of bolts on flush-mount cap: 3, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity Slight hydrocarbon odor	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.03'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 35.83. Current well depth: ~35.8 ft Well cannot be accurately measured due to diameter, soft bottom & sounder limitations.

17. Depth to water: 22.28'

18. PID reading at wellhead: 1.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo top view 1148
well has sock in it
DTP 22.25'

SWJ
9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 03 Eagle Bay Well No.: RW-303-13

Inspector(s): T. Roelofs & D. Bolmer Date/Time: 9/7/13 0849

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 20-30 mph Wind Overcast 50°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" J plug		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water? Trace	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness <0.01'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 19.41 (Sept 2012) Current well depth: 19.45'.

17. Depth to water: 6.44'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: DTP 6.44' Trace
Photo W 0849

SWJ
9/9/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Eagle Bay Sample Location: RW-303-13

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/9/13 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 40°F clear skies 5-10mph winds

Well Data

Diameter of Well Casing: 4"

Depth to Water Below Top of Casing (feet): 6.44'

Total Depth of Well Below Top of Casing (feet): 19.45' (9/7/13)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 13.01'

Gallons per Foot: 0.65 Gallons in Well: 8.457

Three Times Casing Volume: 25.37 Gallons Purged from Well: 2.66

Screen 4'-16' gs 7'-19' to sgt screen 7-19.45'

Intake 13.225'

Water Sample Data

Sample Number: RW-303-13-2013

Time Sample Collected: 0935

Sampling Method: low flow peristaltic

Remarks (Color/Odor): colorless odorless

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0900	5.59	0.115	0.0	4.47	8.99	0.01	187
.333	0904	5.67	0.111	0.0	3.53	9.05	0.01	161
.666	0908	5.65	0.110	0.0	3.18	9.11	0.01	150
1.000	0912	5.65	0.110	0.0	3.01	9.17	0.01	140
1.333	0916	5.64	0.110	0.0	2.96	9.20	0.01	131
1.666	0920	5.64	0.111	0.0	2.87	9.24	0.01	123
2.00	0924	5.64	0.112	0.0	2.77	9.27	0.01	115
2.33	0928	5.64	0.112	0.0	2.73	9.28	0.01	110
2.66	0932	5.64	0.113	0.0	2.68	9.30	0.01	108

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Water level is above screen

MS/MSD

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SWJ 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: RW-303-14

Inspector(s): E. Roelofs / D. Balmer Date/Time: 9/7/13 0939

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 20-30mph wind rain

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" J plug		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements? Consistent w/ 2011	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 19.45' (Sealaska 2011) 19.00' (Sealaska 2011) Current well depth: 19.50' btoc.

17. Depth to water: 7.73' btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: 0939 Photo 5

SWJ 9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: RW-303-15

Inspector(s): S. Rocklots D. Balm Date/Time: 9/7/13 1053

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 25-30mph winds overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" T plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: ~~34.06~~ 34.06' (Sealaska Well) Current well depth: 34.05'.

17. Depth to water: 27.55' btoc

18. PID reading at wellhead: 3.1 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo E 1053

SW
9/9/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Well No.: RW-303-16

Inspector(s): G. Rockers / D. Brimie Date/Time: 9/7/13 0926

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F slight rain 25-30 mph wind

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: slight hydrocarbon odor	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 17.46' btoc (Fall 2012) Current well depth: 17.50' btoc.

17. Depth to water: 7.79' btoc

18. PID reading at wellhead: 40.2 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo W 0926

SWJ
9/9/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Eagle Bay Sample Location: RW-303-16

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/9/13 1425

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°f Blueskies 5-10 mph wind

Well Data

Screen
4'-17' gs
7'-20' TC
Sat Screen
7.79-17.5
Intake 12.645

Diameter of Well Casing: 4"

Depth to Water Below Top of Casing (feet): 7.79' TC

Total Depth of Well Below Top of Casing (feet): 17.50 TC (9/7/13)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 9.71

Gallons per Foot: 0.65 Gallons in Well: 6.31

Three Times Casing Volume: 18.93 Gallons Purged from Well: 1.333

Water Sample Data

Sample Number: RW-303-16-2013

Time Sample Collected: 1500

Sampling Method: low flow peristaltic

Remarks (Color/Odor): colorless, slight hydrocarbon odor, no sheen

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1442	5.85	0.211	3.0	0.00	8.83	0.01	-27
.333	1446	5.86	0.213	2.7	0.00	8.74	0.01	-30
.666	1450	5.87	0.218	2.2	0.00	8.62	0.01	-35
1.000	1454	5.86	0.220	0.2	0.00	8.59	0.01	-38
1.333	1458	5.85	0.222	0.0	0.00	8.57	0.01	-39
~~1.666~~	~~1502~~							
~~2.000~~	~~1506~~							
~~2.333~~								
~~2.666~~								
~~3.000~~								
~~3.333~~								

ER 9/9/13

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/9/13

Surface Water Sampling
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Eagle Bay Sample No.: Dup NL-19-2013 [1030] NL-09-2013 [1000]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/15/13 / 0945

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 42°, wind from S at 15 mph, overcast

		Yes	No
1.	Is there any sheen or visible contamination on or in the water?	☒	☐
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☒	☐

1. visiable sheen seen along the surface of water at and near sample location

2. moderate smell of petroleum

3.	Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒

4. If so, describe: NA

5.	Is there discoloring along the banks of the water body that may be due to contamination? If yes, describe appearance, location, and square footage. 130 FT ASF 1-3-14	☒	☐

Approximatly 75' upgradient from sample location 100ft NL 9/1/13 a 3x~~100~~ft black staining area behind boom section 8 number eight (8)

6. Describe the sample (clear, colored, muddy, odors, etc.):

Slight white cloudy water due to wind activity - moderate smell of petroleum.

7.	Is there vegetation growing nearby?	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? teal, Raven	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep: _____

40ft wide x 12 inches deep

8.	Is erosion occurring? If yes, describe conditions and severity	☐	☒

9.	Is deposition occurring in the water body? If yes, describe conditions	☐	☒

Additional Notes: East Canal water level higher than past events

SWJ 9/15/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Eagle Bay Sample Location: NL-09

Inspector(s): ALewis, R-Boyd Date/Time: 9/15/13 / 0945

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 42°, wind from S at 15 mph, overcast

Well Data

Diameter of Well Casing: Surface Water

Depth to Water Below Top of Casing (feet): NA

Total Depth of Well Below Top of Casing (feet): NA

Purge Method: NA

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): NA

Gallons per Foot: NA Gallons in Well: NA

Three Times Casing Volume: NA Gallons Purged from Well: NA

Water Sample Data

Sample Number: NL-09-2013 | Dup: NL-19-2013

Time Sample Collected: 1000 | 1030

Sampling Method: Grab

Remarks (Color/Odor): moderate smell of petroleum, slight white cloudy water due to wind activity.

Stabilized? NA 3 Casing Volumes Removed? NA

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0955	6.54	0.622	49	8.01	9.22	0.00	89
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/15/13

Seep and Shoreline
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Well No.: NA

Inspector(s): J. Hightstone B. Schlager Date/Time: 9/10/13 1050

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° F overcast winds 15 mph

		Yes	No
1-3-14 ASF	1. Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate.	☑	☐

N ~~150~~ 130' SEEP NOTED, ~~50~~ 10' N OF THE BEGINNING OF BOOM #8 TO BOOM # 3. SEEP APPEARS TO HAVE EXPANDED NORTH PAST BOOM 8. HOWEVER, THE AREA HAS NOT BEEN PREVIOUSLY INUNDATED AND CONSIDERED UPLAND SOILS IN PAST. ASF 1-3-14

1-3-14 ASF	2. Is the seep flowing directly into a surface water body? EAST CANAL	☑	☐
	3. Is this a new seep or a seep that has been previously documented? ~~NO~~ / PREV. DOCUMENTED BUT MANAGED BY BOOMS. SW 9/11/13		
	4. Are there any odors? If yes, describe odor and intensity	☑	☐

YES, HEAVY PETRO ODOR ~~Along~~ AT ASF 1-3-14 SEEP AREA

	5. Is there vegetation growing at the seep location? BUT STRESSED & DEAD IN OILY AREAS ASF 1-3-14	☑	☐
	6. Is the shoreline discolored by suspected contamination? If yes, describe appearance, location, and square footage	☑	☐

ASF 1-3-14 BLACK ~~SINE~~ OILY SEDIMENTS ALONG ~~SEEP AREA N 12"~~ SHORELINE APPROXIMATELY 130' LONG X 3' WIDE. ASF 1-3-14 ALSO IRON STAINING SLUDGE ALONG SEEP AREA

	7. Is there vegetation growing on the shoreline? HEAVILY VEGETATED ESPECIALLY NORTH OF BOOMS AT THE TOP OF CANAL SECTION.	☑	☐
	8. Is any suspect ordnance found on the shoreline? If yes, describe the location and approximate size and shape, and color without approaching ordnance. Note location on back of form. Secure area. Stop work! Notify Navy CSO immediately! ASF 1-3-14	☐	☑
	9. Was there any other manmade debris (exclude items from off-island activities) found on the shoreline? If yes, describe debris, whether it could be contributing to contamination, and provide number of pieces or square footage of area	☐	☑

Additional Notes: DIKES PUMPS HAVE BEEN OPERATIONAL BUT ~~AT THE~~ INTERMITTANTLY WORKING ASF 1-3-14 ~~OF INSPECTION~~ THE WATERLEVEL IS HIGH IN EAST CANAL DUE TO POSSIBLE CULVERT BLOCKAGES DOWNSTREAM. DOT IS INVESTIGATING

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Sandy Cove Well No.: 03-104

Inspector(s): R. Ruelas & D. Balmer Date/Time: 9/10/13 1615

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 10-15 mph light rain overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 3in T plug		
5. Specify size and number of bolts on flush-mount cap: 3, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: slight petroleum odor	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 24.44' TC (Sealaska 2012). Current well depth: 24.75'.

17. Depth to water: 14.00' TC

18. PID reading at wellhead: 1.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SWJ 9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Sample Location: 03-104

Inspector(s): E. Roelofs & D. Balmer Date/Time: 9/10/13 1628

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F light rain 10-15 mph wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 19.80'

Total Depth of Well Below Top of Casing (feet): 24.44' (Sealaska 2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4.64'

Gallons per Foot: 0.16 Gallons in Well: 0.7424

Three Times Casing Volume: 2.227 Gallons Purged from Well: 1.333

Screen 16' - 26' gs
Sat screen 19.80' - 24.44'
Intake 22.1

Water Sample Data

Sample Number: 03-104-2013

Time Sample Collected: 1650

Sampling Method: low flow peristaltic

Remarks (Color/Odor): slight hydrocarbon odor, colorless, no sheen

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1632	5.87	0.234	4.9	1.00	8.00	0.01	5
.333	1636	5.77	0.244	3.2	0.00	7.61	0.01	1
.666	1640	5.77	0.250	1.8	0.00	7.56	0.01	-5
1.000	1644	5.77	0.256	0.4	0.00	7.53	0.01	-8
1.333	1648	5.77	0.255	0.0	0.00	7.55	0.01	-9
~~1.666~~	~~1652~~							

ER 9/10/13

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62, Sandy Cove Well No.: 03-155

Inspector(s): J. Highstone B. Schlegel Date/Time: 9/10/13 1613

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° F overcast light rain 20 mph gusts

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" 9/10/13 1 1/2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition? Cracked collar	☐	☑
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☐
10. Is there an oily sheen on the water?	☐	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type:	☐	☑

16. Previous well depth: 25.00' (TOSS well inspection 2013). Current well depth: 25.01'.

17. Depth to water: 19.31'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SUMU 62 Sandy Cove Sample Location: 03-155

Inspector(s): J. Hightstone B. Schlager Date/Time: 9/11/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F OVERCAST LIGHT RAIN GUST TO 20mph

Well Data

Diameter of Well Casing: 1 1/2"

Depth to Water Below Top of Casing (feet): 19.32'

Total Depth of Well Below Top of Casing (feet): 25.00' (TOC 2012 WELL INSPECTION)

Purge Method: PERISTALTIC PUMP 2.84

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.68

Gallons per Foot: 0.10 Gallons in Well: .568

Three Times Casing Volume: 1.704 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 03-155-2013

Time Sample Collected: 1130

Sampling Method: LOW FLOW PERISTALTIC PUMP

Remarks (Color/Odor): CLEAR / NO ODOR

Stabilized? NO 3 Casing Volumes Removed? YES

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1108	6.18	0.478	41.2	0.00	7.30	0.0	-6
0.5	1113	6.01	0.513	24.1	0.00	6.83	0.0	-10
1.0	1118	6.00	0.503	25.3	0.00	6.75	0.0	-12
1.5	1123	5.99	0.499	47.3	0.00	6.74	0.0	-14
2.0	1128	5.99	0.505	48.6	0.00	6.66	0.0	-14

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: SCREEN 10' PID 0.0 ppm AT WELLHEAD 0.0 ppm AT BREATHING ZONE

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62, Sandy Cove Well No.: 03-619

Inspector(s): J. Hightstone B. Schlegel Date/Time: 9/10/13 1608

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F overcast with light rain 20mph Gusts

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☐	☐
4. Specify type of cap: 2" Bi Metal		
5. Specify size and number of bolts on flush-mount cap: (2) 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: N/A	☐	☑

16. Previous well depth: 22.15' (TO 55 well inspection 2012). Current well depth: 21.95'.

17. Depth to water: 16.05'

18. PID reading at wellhead: 1.2 ppm Breathing Zone: 0.0 ppm

Additional notes:

- Photo taken for photo log

Well is located 100' from the main road along an old fence

SW 9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Sandy Cove Sample Location: 03-619

Inspector(s): E. Roelofs D Balmer Date/Time: 9/11/13 1340

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 40°F 35-45 mph wind rain

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 16.65'

Total Depth of Well Below Top of Casing (feet): 22.15'

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.5

Gallons per Foot: 0.16 Gallons in Well: 0.88

Three Times Casing Volume: 2.64 Gallons Purged from Well: 1.333

Screen 12.1'-22.1' bgs
14.65'-24.65'
16.65'-22.15'
Intake ~~5.5~~ ER 9/11/13
19.4'

Water Sample Data

Sample Number: 03-619-2013

Time Sample Collected: 1410

Sampling Method: low flow peristaltic

Remarks (Color/Odor): colorless, odorless

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1352	5.72	0.289	0.0	0.63	7.86	0.01	169
0.333	1356	5.82	0.290	0.0	0.09	7.45	0.01	168
0.666	1400	5.78	0.286	0.0	0.00	7.25	0.01	169
1.000	1404	5.75	0.282	0.0	0.00	7.14	0.01	171
1.333	1408	5.73	0.280	0.0	0.00	7.15	0.01	173
ER 9/11/13 ~~1.666~~	~~1412~~							
~~2.000~~	~~1416~~							

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: PID 2.0 ppm wellhead 0.0 ppm breathing zone

MS/MSD - SW 9/11/13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Sandy Cove Well No.: 03-778

Inspector(s): E. Roelofs & D. Balmer Date/Time: 9/10/13 1605

Company: Sealaska Environmental Services, LLC

Weather/Temperature: light rain 50° 10-15 mph wind

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2 in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Slight hydrocarbon odor when pumping yes	☒	☒ ER 9/11/13
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 27.63 (Sealaska 2012). Current well depth: 27.72' *Soft bottom

17. Depth to water: 19.85

18. PID reading at wellhead: 1.0 ppm Breathing Zone: 0.0 ppm

Additional notes: 1605 photo 6E

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Sandy Cove Sample Location: 03-778

Inspector(s): E. Roelofs & D. Balmer Date/Time: 9/11/13 0930

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 40°F light rain 30-40 mph wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 19.85

Total Depth of Well Below Top of Casing (feet): 27.63 (Sealaska 2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.78

Gallons per Foot: 0.16 Gallons in Well: 1.2448

Three Times Casing Volume: 3.73 Gallons Purged from Well: 1.333

Screen 14'-24' gs

17-27 TC

Sat screen 19.85-27.63

Intake 23.74'

Water Sample Data

Sample Number: 03-778-2013

Time Sample Collected: 1010

Sampling Method: low flow peristaltic

Remarks (Color/Odor): slight hydrocarbon odor, colorless

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	0952	5.92	0.280	0.0	0.84	7.85	0.01	-35
.333	0956	6.12	0.282	0.0	0.00	7.24	0.01	-68
.666	1000	6.20	0.278	0.0	0.00	7.09	0.01	-79
1.000	1004	6.20	0.276	0.0	0.00	6.97	0.01	-82
1.333	1008	6.21	0.273	0.0	0.00	6.91	0.01	-83
~~1.666~~	~~1012~~							
~~2.000~~	~~1016~~							

GR 9/11/13

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: PID 0.0 Both

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Sandy Cove Well No.: HMW-146-1

Inspector(s): E. Roelofs & D. Balmer Date/Time: 09/10/13 0901

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 5-10mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Spring w/ slip cap		
5. Specify size and number of bolts on flush-mount cap: NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 22.15' (Sealaska 2012). Current well depth: 21.85. Soft bottom

17. Depth to water: 17.04' TC

18. PID reading at wellhead: 0.1 ppm Breathing Zone: 0.0 ppm

Additional notes: 0901 photo topview

* Orange "Crucie" in well

SW
9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Well No.: MRP-MW-3

Inspector(s): G. Ruelas & D. Balmer Date/Time: 9/10/13 1107

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F light rain overcast 5-10mph wind

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" Slip cap		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? Rusty but functional	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: moderate sulfurous odor	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 10.62'. Current well depth: 10.70'.

17. Depth to water: 8.29'

18. PID reading at wellhead: 1720 ppm Breathing Zone: 0.0 ppm

Additional notes: photo SE 1107

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Sandy Cove Sample Location: MRP-MW-3

Inspector(s): E. Roelofs & D. Balmer Date/Time: 9/10/13 1110

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F overcast light rain 5-10 mph wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 8.29'

Total Depth of Well Below Top of Casing (feet): 10.62' (Sealaska 2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 2.33

Gallons per Foot: 0.16 Gallons in Well: 0.373

Three Times Casing Volume: 1.118 Gallons Purged from Well: 1.333

Screen
3.8' - 8.3' gs
5.8' - 10.3' TC
8.29' - 10.62'
Intake 9.455'

Water Sample Data

Sample Number: MRP-MW3-2013

Time Sample Collected: 1150

Sampling Method: low flow peristaltic

Remarks (Color/Odor): sulferous odor colorless

Stabilized? yes 3 Casing Volumes Removed? yes

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1128	5.81	0.229	0.0	0.30	9.21	0.01	-33
.333	1132	5.99	0.240	0.0	0.02	8.94	0.01	-49
.666	1136	5.98	0.245	0.0	0.00	8.87	0.01	-52
1.000	1140	5.98	0.244	0.0	0.00	8.84	0.01	-55
1.333	1144	5.98	0.244	0.0	0.00	8.83	0.01	-56

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65
1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLV1
9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Well No.: MW-107-1

Inspector(s): E. Roelofs & D. Date/Time: 9/10/13 1455

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F Over Cast 5-10 mph wind

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" J plug		
5. Specify size and number of bolts on flush-mount cap: 3, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity slight plastic odor	☒	☐
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness <.01.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 29.06' (Sealaska 2012). Current well depth: 29.00'.

17. Depth to water: 18.60

18. PID reading at wellhead: 23.5 ppm Breathing Zone: 0.0 ppm

Additional notes: 1455 photo taken

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Sandy Cove Sample Location: MW-107-1

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/10/13 1515

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 5-10mph winds overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 18.60'

Total Depth of Well Below Top of Casing (feet): 29.06' (Sealaska 2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 10.46'

Gallons per Foot: 0.16 Gallons in Well: 1.6736

Three Times Casing Volume: 5.02 Gallons Purged from Well: 1.333

Screen 14'-29'

Sat screen 18.60'-29.06'

Intake 23.8'

Water Sample Data

Sample Number: MW-107-1-2013

Time Sample Collected: 1540

Sampling Method: low flow peristaltic

Remarks (Color/Odor): light plastic odor, colorless

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1520	5.89	0.220	0.0	1.60	6.98	0.01	-25
.333	1524	5.95	0.223	0.0	0.30	6.72	0.01	-30
.666	1528	5.96	0.224	0.0	0.00	6.63	0.01	-34
1.000	1532	5.96	0.221	0.0	0.00	6.59	0.01	-36
1.333	1536	5.95	0.221	0.0	0.00	6.54	0.01	-38
~~1.666~~	~~1540~~							
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
N/A		N/A		N/A				

ER 9/10/13

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Sandy Cove Well No.: MW-134-10

Inspector(s): E. Roelofs & D. Balmer Date/Time: 9/10/13 0923

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F 10-15 mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" J plug		
5. Specify size and number of bolts on flush-mount cap: 2, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 22.46'. Current well depth: 22.04'.*

17. Depth to water: 17.18'

18. PID reading at wellhead: 30.5 ppm Breathing Zone: 0.0 ppm

Additional notes: photo 0923 top view

* pvc cut down during 2013 well repair

SW
9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62, Sandy Cove Well No.: MW-134-11

Inspector(s): J. Highstone B. Schleger Date/Time: 9/10/13 1541

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52° overcast / light rain / 20 mph gusts

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" Butterfly		
5. Specify size and number of bolts on flush-mount cap: (3) 9/16" Bolts (stripped)*		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: moderate hydrocarbon odor while sampling yes	☒	☑
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☑

ER 9/11/13

16. Previous well depth: 21.56' (TOSS well inspection 2012). Current well depth: 21.58'.
17. Depth to water: 18.49'
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Wellhead cover bolts (3) stripped
1545 - PHOTO TAKEN FOR PHOTO LOG

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Sample Location: MW-134-11

Inspector(s): E. Roelofs & D. Balmer Date/Time: 9/11/13 1030

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 40° rain 30-40 mph winds

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 18.49'

Total Depth of Well Below Top of Casing (feet): 21.56' (Sealaska 2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 3.07

Gallons per Foot: 0.16 Gallons in Well: 0.4912

Three Times Casing Volume: 1.47 Gallons Purged from Well: 1.000

Screen 12.1' - 22.1'

18.49' - 21.56'

Intake 20.0cs

Water Sample Data

Sample Number: MW-134-11-2013

Time Sample Collected: 1110

Sampling Method: low flow peristaltic

Remarks (Color/Odor): colorless, moderate hydrocarbon odor

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1056	6.04	0.491	0.0	0.88	8.05	0.02	-43
0.333	1100	6.05	0.503	0.0	0.00	7.67	0.02	-55
0.666	1104	6.05	0.507	0.0	0.00	7.56	0.02	-59
1.000	1108	6.05	0.510	0.0	0.00	7.52	0.02	-61
~~1.333~~	~~1112~~							
~~1.666~~	~~1116~~							
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
N/A		N/A		N/A				

ER 9/11/13

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Well No.: MW-146-1

Inspector(s): E. Roelofs & D. Balmer Date/Time: 9/10/13 1359

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F light rain w/ sunshine peeking through

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2" slip cap		
5. Specify size and number of bolts on flush-mount cap: 3, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: light hydrocarbon odor	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 19.58'. Current well depth: 19.6.

17. Depth to water: 17.52'

18. PID reading at wellhead: 17.6 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMU 62 Sandy Cove Sample Location: MW-146-1

Inspector(s): E. Roelofs & D. Balmer Date/Time: 9/10/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F light rain sunshine & overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 17.52

Total Depth of Well Below Top of Casing (feet): 19.58 (Sealaska 2012)

Purge Method: low flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 2.06

Gallons per Foot: 0.16 Gallons in Well: ~~0.330~~ 0.3296 ER 9/11/13

Three Times Casing Volume: 0.988 Gallons Purged from Well: 1.000

Screen? 17.52'-19.58' Intake 18.55

Water Sample Data

Sample Number: MW-146-1-2013

Time Sample Collected: 1440

Sampling Method: low flow peristaltic

Remarks (Color/Odor): colorless w/ light hydrocarbon odor

Stabilized? NO 3 Casing Volumes Removed? yes

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1420	5.55	0.259	0.0	0.50	8.94	0.01	34
.333	1424	5.59	0.266	0.0	0.00	8.41	0.01	10
.666	1428	5.61	0.270	0.0	0.00	8.16	0.01	3
1.000	1432	5.61	0.272	0.0	0.00	8.11	0.01	-1

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SLW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62, Sandy Cove Well No.: MW-187-1

Inspector(s): J. Highsbre B. Schlegel Date/Time: 9/10/13 1523

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F overcast, light rain, 20 mph wind

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" PVC Slip Cap		
5. Specify size and number of bolts on flush-mount cap: (3) 9/16" Bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity. YES *	☑	☑ BS 9/11/13
10. Is there an oily sheen on the water?	☐	☑
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☑
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: _____	☐	☑

16. Previous well depth: 22.31' (TO55 well inspection 2012) Current well depth: 22.35'.

17. Depth to water: 19.42'

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes: 1534 - photo taken for log book

* THE ~~COLOR~~ ODOR COLLECTED IN THE PURGE BUCKET SMELLED LIKE CHEMICAL NOT A BIO OR PETROLEUM SMELL BUT CHEMICAL SMELL. UNABLE TO IDENTIFY.

SW
9/11/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: SWMUG2 SANDY COVE Sample Location: MW-187-1

Inspector(s): J. HIGHSTONE, B. SCHLEIGER Date/Time: 9/11/13 0928

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN/DRIZZLE, 20 mph WIND, 45°

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 19.48' 1.415

Total Depth of Well Below Top of Casing (feet): 22.31' (TOSS 2012 well inspection)

Purge Method: PERISTALTIC PUMP

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 2.83

Gallons per Foot: 0.16 Gallons in Well: 0.452

Three Times Casing Volume: 1.358 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: MW-187-1-2013

Time Sample Collected: 1017

Sampling Method: LOW FLOW PERILSTALTIC PUMP

Remarks (Color/Odor): NO ODOR AT WELL HEAD BUT PURGE WATER IN BUCKET SW smelled chemical / NO color

Stabilized? NO 3 Casing Volumes Removed? 1.5 gal, YES

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1000	5.74	0.529	104.0	2.58	7.46	0.0	86
0.5	1005	5.84	0.638	35.3	0.22	6.70	0.0	13
1.0	1010	5.97	0.703	28.7	0.00	6.62	0.0	-28
1.5	1015	6.07	0.870	43.7	0.00	6.61	0.0	-53

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				

Notes: SCREEN ~~25~~ 15' (B) 9/10/13 PID 0.0 BREATHING ZONE AND AT THE WELLHEAD

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: SWMU 62 Sandy Cove Well No.: RW-102-4

Inspector(s): E. Rueloos & D. Balmer Date/Time: 9/10/13 ~~0310~~ 0844 EJR 9/10/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50° 10-15 mph wind overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 6" PVC slip cap		
5. Specify size and number of bolts on flush-mount cap: 3, 9/16" bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements? See note	☐	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 33.32'. Current well depth: See notes.

17. Depth to water: 19.51'

18. PID reading at wellhead: 4.3 ppm Breathing Zone: 0.0 ppm

Additional notes: 0844 Photo topview. Did not measure DTB due to pump in well. Not worth damaging equipment to get reading

SW 9/11/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: TANKER SITED Well No.: 04-175

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/3/13 1440

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 48°F, 10mph wind S, overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 4" Butterfly		
5. Specify size and number of bolts on flush-mount cap: 3 x 9/16" good condition		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 14.42 ft btoc (2012). Current well depth: 14.41 ft btoc (9/3/13 Solid bottom)
TOS [illegible] well inspection checklist
17. Depth to water: 10.85 ft btoc
18. PID reading at wellhead: 9.8 ppm Breathing Zone: 0.0 ppm

Additional notes:

JW
9/4/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Tanker Shed Sample Location: 04-175

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/3/13 / 1440

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 48°, S. wind at 10mph, overcast

Well Data

Diameter of Well Casing: 4"

Depth to Water Below Top of Casing (feet): 6.85

Total Depth of Well Below Top of Casing (feet): 14.42 (2012)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.57

Gallons per Foot: 0.65 Gallons in Well: 4.92

Three Times Casing Volume: 14.76 Gallons Purged from Well: 30

Water Sample Data

Sample Number: 04-175-2013

Time Sample Collected: 1545

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): No odor, clear

Stabilized? yes 3 Casing Volumes Removed? No

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1507	6.12	0.289	17	1.05	10.09	0.00	-19
.5	1512	6.11	0.291	15	0.00	9.88	0.00	-2
1.0	1517	6.11	0.291	Ø	0.00	9.90	0.00	-5
1.5	1522	6.11	0.291	Ø	0.00	9.97	0.00	-13
2.0	1527	6.12	0.290	Ø	0.00	10.01	0.00	-20
2.5	1532	6.13	0.290	Ø	0.00	10.09	0.00	-25
3.0	1537	6.13	0.289	Ø	0.00	10.11	0.00	-28

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID Breathing Zone: 0.0ppm, wellhead: 9.8ppm

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW
9/4/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: TANKER SHED Well No.: 04-290

Inspector(s): Q. Roelofs / D. Balmer Date/Time: 9/3/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partial Blue Skies 20-30 mph wind 46°F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: 1 "1" bolt		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? missing bolt	☐	☒
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: Slight petroleum odor	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: No	☐	☒

16. Previous well depth: 14.72'. Current well depth: 14.60.
TO55 3/31/13 Well Inspection Checklist
17. Depth to water: 7.22'
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

Screen 3' - 13'
Sat Screen 7.22 - 14.5'
Intake 10.86

DW
9/3/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Tanker Shed Sample Location: 04-290 1600, 1610

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/3/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partial Blue Skies 20-30 mph wind 46°F

Well Data

Diameter of Well Casing: 2in

Depth to Water Below Top of Casing (feet): 7.22'

Total Depth of Well Below Top of Casing (feet): 14.72' (2012)

Purge Method: low flow paraslaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.5

Gallons per Foot: 0.16 Gallons in Well: 1.2

Three Times Casing Volume: 3.6 Gallons Purged from Well: 2.00

Water Sample Data

Sample Number: 04-290-2013, 04-300-2013 Duplicate

Time Sample Collected: 1600, 1610

Sampling Method: low flow paraslaltic

Remarks (Color/Odor): Slight hydrocarbon, colorless, no sheen

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1534	5.83	0.222	0.0	2.06	9.58	0.01	-19
.333	1538	5.90	0.227	0.0	1.07	9.40	0.01	-24
.666	1542	5.90	0.229	0.0	0.56	9.28	0.01	-26
1.000	1546	5.90	0.231	0.0	0.18	9.28	0.01	-26
1.333	1550	5.90	0.232	0.0	0.00	9.28	0.01	-27
1.666	1554	5.90	0.231	0.0	0.00	9.26	0.01	-27
2.000	1558	5.90	0.231	0.0	0.00	9.28	0.01	-28

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: TANKER SITE P Well No.: 04-301

Inspector(s): J. Highstone, B. Schlecger Date/Time: 9/3/13 1521

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F WINDY AND OVERCAST

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 4" Butterfly		
5. Specify size and number of bolts on flush-mount cap: (2) 9/16" Bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition? Cracked monument base	☐	☑
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: NA	☐	☑

16. Previous well depth: 13.28. Current well depth: 13.29' *
TO 65 8/31/12 Inspector Checklist
17. Depth to water: ~~16.94~~ 6.94'
18. PID reading at wellhead: 115ppm Breathing Zone: 0.0 ppm

Additional notes: Hard Bolts on well
1529 - Photo taken for Photo log

SW
9/4/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: TANKER SHED Well No.: 04-302

Inspector(s): J Highstone B. Schleser Date/Time: 9/3/13 1529

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55 F Cloudy and windy

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 4" slip cap		
5. Specify size and number of bolts on flush-mount cap: (2) 9/16" Bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition? Monument base is cracked	☐	☑
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type:	☐	☑

16. Previous well depth: 13.38' (TOSS 8/3/13 inspection checklist). Current well depth: 13.25' *

17. Depth to water: 6.70'

18. PID reading at wellhead: 1.1 ppm Breathing Zone: 0.0 ppm

Additional notes: Soft bottom *
1537 PHOTO TAKEN

SW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: TANKER SHED Well No.: 04-306

Inspector(s): A. Lewis, R. Bajel Date/Time: 9/3/13 1330

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F, S. wind at 10 mph, overcast

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 6" Butterfly		
5. Specify size and number of bolts on flush-mount cap: 2 X 9/16"		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity: light smell of petroleum	☒	☐
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 13.02' ft btoc (TO 55 9/3/12 Inspection Checklist) Current well depth: 13.06 ft btoc (solid bottom)

17. Depth to water: 7.21 ft btoc

18. PID reading at wellhead: 7.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SW
9/3/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Tanker Shed Sample Location: 04-306

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/3/13 / 1330

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 45°F, S. wind at 10mph, overcast

Well Data

Diameter of Well Casing: 6"

Depth to Water Below Top of Casing (feet): 7.21

Total Depth of Well Below Top of Casing (feet): 13.02 (2012), 13.06 (Solid Bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.81

Gallons per Foot: 1.46 Gallons in Well: 8.48

Three Times Casing Volume: 25.44 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 04-306-2013

Time Sample Collected: 1425

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): light smell of petroleum

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	1400	6.08	0.271	27	1.90	10.40	0.00	-56
.5	1405	6.07	0.273	8	0.00	9.91	0.00	-40
1.0	1410	6.07	0.272	Ø	0.00	9.79	0.00	-29
1.5	1415	6.07	0.271	Ø	0.00	9.74	0.00	-25
2.0	1420	6.08	0.270	Ø	0.00	9.78	0.00	-21

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SWL 9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: TANKER SHED Well No.: 04-312

Inspector(s): J. Highstone B. Schlenger Date/Time: 9/3/13 1509

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F Windy and overcast

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 6" Butterfly		
5. Specify size and number of bolts on flush-mount cap: (2) 9/16" Bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition? CRACKED MONUMENT BASE	☐	☑
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☐	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☐	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: ~~TRACE~~ (BG) 9/3/13	☐	☑

16. Previous well depth: 12.95'. Current well depth: 12.90' *.
TOSS 8/31/13 INSPECTION CHECKLIST

17. Depth to water: 6.81'

18. PID reading at wellhead: 2.9 ppm Breathing Zone: 0.0 ppm

Additional notes: HARD BOTTOM *
1516 - PHOTO TAKEN FOR PHOTO LOG

JWW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: TANKER SHED Well No.: 04-313

Inspector(s): J. HighStone B. Schlieger Date/Time: 9/3/13 1455

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F WINDY AND OVERCAST

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 6" Butterfly		
5. Specify size and number of bolts on flush-mount cap: (2) 9/16"		
6. Is there any evidence of tampering with the cap or well casing? NO	☑	☐
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: NA	☐	☑

16. Previous well depth: 13.38' (TO55 9/31/12 INSPECTION CHECKLIST). Current well depth: 13.25'.

17. Depth to water: 6.85'

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes: ~~HARD BOTTOM~~ HARD BOTTOM ON WELL
~~14~~ 9/3/13 PHOTO TAKEN FOR LOG BOOK - 1506

SW
9/3/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: TANKER SHED Well No.: 04-601

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/3/13 1337

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 20 30 mph winds overcast 45 °F

	Yes	No
1. Was the monitoring well located?	☒	☐
2. Is the well clearly labeled? If not, please re-label.	☒	☐
3. Is there a cap on the monitoring well?	☒	☐
4. Specify type of cap: 2in J plug		
5. Specify size and number of bolts on flush-mount cap: N/A		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition?	☒	☐
8. Is the casing in good condition?	☒	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☒
10. Is there an oily sheen on the water?	☐	☒
11. Is the well dry?	☐	☒
12. Is there product in the well?	☐	☒
13. If so, product thickness N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 bollards	☒	☐

16. Previous well depth: 17.83' (TO66 8/3/13 Inspection Checklist). Current well depth: 17.65'.

17. Depth to water: 10.35'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: Photo 1337 SW

Screen 4.5' – 14.5'
7.5' – 17.5'
10.35' – 17.83'

Intake 14.09'

SW
9/4/13

SEALASKA

WATER SAMPLING LOG

Project Name: 2013 Adak LTM Project No.: TO66

Site Name: Tanker Shed Sample Location: 04-601

Inspector(s): E. Roelofs D. Balmer Date/Time: 9/3/13 ~~1430~~ 1337 SW 9/3/13

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 20-30 mph winds overcast

Well Data

Diameter of Well Casing: 2 in

Depth to Water Below Top of Casing (feet): 10.35'

Total Depth of Well Below Top of Casing (feet): 17.83' (2012)

Purge Method: low flow parastaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.48

Gallons per Foot: 0.16 Gallons in Well: 1.1968

Three Times Casing Volume: 3.59 Gallons Purged from Well: 2.666

Water Sample Data

Sample Number: 04-601-2013

Time Sample Collected: 1430

Sampling Method: low flow parastaltic

Remarks (Color/Odor): colorless, odorless, noshen

Stabilized? yes 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
Initial	1356	5.77	0.134	0.0	4.04	8.42	0.01	216
.333	1400	5.78	0.124	0.0	3.61	8.27	0.01	211
.666	1404	5.78	0.123	0.0	4.00	8.23	0.01	209
1.000	1408	5.77	0.124	0.0	3.80	8.23	0.01	160
1.333	1412	5.77	0.126	0.0	3.63	8.27	0.01	121
1.666	1416	5.77	0.127	0.0	3.75	8.36	0.01	100
2.000	1420	5.78	0.128	0.0	3.84	8.44	0.01	90
2.33	1424	5.79	0.129	0.0	3.85	8.45	0.01	85
2.66	1428	5.80	0.130	0.0	3.78	8.50	0.01	80

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: MS/MSD SW 9/4/13

Well Casing Volumes

GAL/FOOT ¾" = 0.02 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65

1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

SW 9/4/13

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: Adak LTM 2013 Project No.: TO 66

Site Name: TANKER SHED Well No.: TS-03

Inspector(s): J Hughstone B. Schlegel Date/Time: 9/3/13 1445

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F windy and overcast

	Yes	No
1. Was the monitoring well located?	☑	☐
2. Is the well clearly labeled? If not, please re-label.	☑	☐
3. Is there a cap on the monitoring well?	☑	☐
4. Specify type of cap: 2" w/ Butterfly Cap		
5. Specify size and number of bolts on flush-mount cap: (2) 9/16" ~~NUTS~~ BOLTS		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition?	☑	☐
8. Is the casing in good condition?	☑	☐
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity	☐	☑
10. Is there an oily sheen on the water?	☑	☐
11. Is the well dry?	☐	☑
12. Is there product in the well?	☑	☐
13. If so, product thickness TRACE.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type: NA	☐	☑

16. Previous well depth: 12.71' (TO55 8/31/12 checklist well inspection). Current well depth: 12.73'.

17. Depth to water: 6.62'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes:

1452- Photo ~~Taken~~ 9/3/13 taken for photo log

SW
9/3/13

APPENDIX B

SAMPLING DEVIATION FORMS

SEALASKA ENVIRONMENTAL SERVICES

CONTRACT NUMBER: N44255-09-D-4005

FIELD CHANGE REQUEST (FCR)

TASK ORDER # 66 FCR # FCR-TO66-01 DATE 8/30/13

LOCATION: Former Naval Complex, Adak, Alaska NTR / RPM Steve Skeehan / Aaron Vernik

1. Document to be changed. Identify revision, date, section, drawing, etc.

2013 Revised Tables to the Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Tables 17-1 and 18-1

2. Description of existing requirement and proposed change (Attach sheet if necessary)

The 2013 Revised Tables indicate GRO and BTEX analysis is required for SWMU 62, New Housing Fuel Leak - Eagle Bay well 03-502. However, ADEC approved a recommendation to discontinue BTEX at this location as presented in the 2012 Final Annual Groundwater Monitoring Report. Thus, the well will be sampled for GRO only, as recommended.

3. Reason for Change (Attach sheet if necessary)

To be consistent with recommendations in the 2012 Final Annual Groundwater Monitoring Report.

4. Originator: (print name and sign) Sherri Wunderlich		**Title** Project Chemist / Program QC Manager	**Date** 8/30/13
Reviewed by: (print name and sign) Annette Franzen		**Title** Task Order Manager	**Date** 8/30/13
Site Superintendent (Print name and sign) Andy Lewis	**Date** 8/30/30	**Task Order Manager (Print name and sign)** Annette Franzen	**Date** 8/30/13
Program QC Manager (Print Name and Sign) Sherri Wunderlich	**Date** 8/30/13	**NTR Acknowledgement (Print name and sign)** Aaron Vernik, RPM	**Date** 8/31/13

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	66
Site Name:	SWMU 62, New Housing Fuel Leak Area	Location:	NL-09
Inspector(s):	Andy Lewis and John Highstone	Date/Time:	10/26/13 16:00
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Cloudy, light wind, ~40° F		

Material to Be Sampled:
Sediment

Measurement Parameter:
GRO, DRO BTEX, PAHs

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

2013 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 10-1, 17-1, 18-1, and 18-2.

Reason for Change in Field Procedure or Analytical Variation:
Sediment sample could not be collected because water levels were too high in East Canal in August and September 2013. Another attempt was made to collect this sample in October 2013, but water levels remained too high.

Variation From Field or Analytical Procedure:
No sediment sample was collected at NL-09. The MS/MSD slated to be collected at this location for all parameters was instead performed on other sediment samples. In some cases, the MS/MSD set may have been extracted outside of holding time due to the parent (unspiked) sample being collected before it was realized that no sediment sample could be obtained at NL-09.

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Annette Franzen		Date:	11/4/13
NAVFAC NW RPM:	Aaron Vernik	Aaron S. Vernik	Date:	11/5/13
Project Manager:	Annette Franzen		Date:	11/4/13
QA Officer/Reviewer:	Sherri Wunderlich	Sherri L Wunderlich	Date	11/4/13

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	66
Site Name:	SWMU 61, Tank Farm B	Location:	NL-04
Inspector(s):	Andy Lewis and John Highstone	Date/Time:	10/25/13/ 11:20
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Cloudy, light wind, ~40° F		

Material to Be Sampled:
Sediment

Measurement Parameter:
Gasoline range organics (GRO)

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

Final Comprehensive Monitoring Plan, Revision 5

Reason for Change in Field Procedure or Analytical Variation:
For the sediment sample, field duplicate, and MS/MSD collected at NL-04 on 9/06/13, the laboratory performed analysis for GRO using incorrect sample containers. (They used containers designated for BTEX, which did not contain a surrogate compound). The error was discovered after the holding time had expired.

Variation From Field or Analytical Procedure:
Recollect GRO aliquots for NL-04 sediment location on 10/25/13 (including sample, field duplicate, and MS/MSD) and submit for analysis.

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Annette Franzen	[signature]	Date:	11/4/13
NAVFAC NW RPM:	Aaron Vernik	Aaron S. Vernik	Date:	11/5/13
Project Manager:	Annette Franzen	[signature]	Date:	11/4/13
QA Officer/Reviewer:	Sherri Wunderlich	Sherri L Wunderlich	Date	11/4/13

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	66
Site Name:	Former Power Plant, Building T-1451	Location:	MW-1451-8
Inspector(s):	Don Balmer and Elle Roelofs	Date/Time:	8/26/2012 11:23
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Partly sunny, slight breeze, ~56° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Field meter parameters (pH, conductivity, turbidity, dissolved oxygen, temperature, salinity, oxidation reduction potential)

Standard Procedure for Field Collection and Laboratory Analysis (cite references):
Final Comprehensive Monitoring Plan, Revision 5, Groundwater Monitoring Sampling and Analysis Plan, Appendix C, Stand-Alone Specific Instruction #6 Water Quality Parameter Measurements

Reason for Change in Field Procedure or Analytical Variation:
Horiba was autocalibrated in the morning and the calibration check was acceptable. Field parameters met stabilization criteria before sampling at MW-1451-8; however, the measurement for pH was suspiciously low at 4.51.

Variation From Field or Analytical Procedure:
After sample collection, another Horiba (which was functioning properly) was inserted and valid field measurements were obtained. The post-sampling field measurements from the properly functioning Horiba were recorded on the Water Sampling Log and will be reported in the Annual GW Monitoring Report.

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Don Balmer and Elle Roelofs	Date:	8/26/13
NAVFAC NW RPM:	Aaron Vernik	Date:	8/31/13
Project Manager:	Annette Franzen	Date:	8/26/13
QA Officer/Reviewer:	Sherri Wunderlich	Date	8/26/13

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	66
Site Name:	Former Power Plant, Building T-1451	Location:	MW-1451-7 and MW-1451-9
Inspector(s):	Andy Lewis, Robert Boyd, Barb Schleiger, and John Highstone	Date/Time:	8/26/2013 16:10 & 18:29
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Rain, light wind, ~50° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Diesel range organics, natural attenuation parameters (alkalinity, sulfate, methane) including field test kit parameters (carbon dioxide, dissolved oxygen, ferrous iron).

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

2013 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 10-1, 17-1, and 18-1.

Reason for Change in Field Procedure or Analytical Variation:
Product thickness in wells MW-1451-7 and MW1451-9 are 0.50 and 0.02 feet, respectively.

Variation From Field or Analytical Procedure:
No sample was collected because product thickness was greater than or equal to 0.02 feet.

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Andy Lewis and John Highstone	Date:	8/26/13
NAVFAC NW RPM:	Aaron Vernik	Date:	8/31/13
Project Manager:	Annette Franzen	Date:	8/26/13
QA Officer/Reviewer:	Sherri Wunderlich	Date	8/26/13

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	66
Site Name:	Former Power Plant, Building T-1451	Location:	MW-1451-2
Inspector(s):	Barb Schleiger and John Highstone	Date/Time:	8/27/2013 15:28
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Overcast, 20 mph wind, ~57° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Field duplicate for test kit parameters (carbon dioxide, dissolved oxygen, ferrous iron).

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

2013 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 10-1, 17-1, 18-1, and 18-2.

Reason for Change in Field Procedure or Analytical Variation:
As discussed in CPQC Report 4, well MW-1451-2 required resampling due to the initial sample being collected without disconnecting the sampling tubing prior to entering the water quality meter. The field duplicate for test kit parameters (carbon dioxide, dissolved oxygen, ferrous iron) scheduled at well MW-1451-2 will be performed at another location.

Variation From Field or Analytical Procedure:
Switch field duplicate for test kit parameters (carbon dioxide, dissolved oxygen, ferrous iron) to another well (Area 303 well MW-303-42).

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Barb Schleiger and John Highstone	Date:	8/27/13
NAVFAC NW RPM:	Aaron Vernik	Date:	8/31/13
Project Manager:	Annette Franzen	Date:	8/27/13
QA Officer/Reviewer:	Sherri Wunderlich	Date	8/27/13

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	66
Site Name:	Area 303	Location:	MW-303-28
Inspector(s):	Andy Lewis, Robert Boyd	Date/Time:	8/27/2013 15:10
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Wind at ~20 mph, ~61° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Gasoline range organics, total and dissolved lead, natural attenuation parameters (alkalinity, sulfate, methane) including field test kit parameters (carbon dioxide, dissolved oxygen, ferrous iron).

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

2013 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 10-1, 17-1, 18-1, and 18-2.

Reason for Change in Field Procedure or Analytical Variation:
Product thickness is 0.07 feet.

Variation From Field or Analytical Procedure:
No sample was collected because product thickness was greater than or equal to 0.02 feet.
Field duplicate scheduled for this well will be moved to well 03-107.

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Andy Lewis and Robert Boyd	Date:	8/27/13
NAVFAC NW RPM:	Aaron Vernik	Date:	8/30/13
Project Manager:	Annette Franzen	Date:	8/27/13
QA Officer/Reviewer:	Sherri Wunderlich	Date	8/27/13

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	66
Site Name:	Area 303	Location:	MW-303-41
Inspector(s):	Andy Lewis, Robert Boyd	Date/Time:	8/29/2013 08:50
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Wind at ~5 mph, light rain, ~54° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Gasoline range organics, BTEX, dibenz(a,h)anthracene, total and dissolved lead, natural attenuation parameters (alkalinity, sulfate, methane) including field test kit parameters (carbon dioxide, dissolved oxygen, ferrous iron). Matrix spike/matrix spike duplicate for sulfate and methane; matrix duplicate for alkalinity.

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

2013 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 10-1, 17-1, 18-1, and 18-2.

Reason for Change in Field Procedure or Analytical Variation:
The well was dry.

Variation From Field or Analytical Procedure:
No sample was collected because the well was dry.
Matrix spike/matrix spike duplicate for sulfate and methane and matrix duplicate for alkalinity scheduled for this well will be moved to well MW-303-42.

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Andy Lewis and Robert Boyd	Date:	8/29/13
NAVFAC NW RPM:	Aaron Vernik	Date:	8/31/13
Project Manager:	Annette Franzen	Date:	8/29/13
QA Officer/Reviewer:	Sherri Wunderlich	Date	8/29/13

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	66
Site Name:	SWMU 60, Tank Farm A	Location:	652 and 653
Inspector(s):	Barb Schleiger and John Highstone	Date/Time:	8/30/2013 10:57 & 11:12
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Partly sunny, light wind, ~58° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Diesel range organics, BTEX, PAHs

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

2013 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 10-1, 17-1, and 18-1.

Reason for Change in Field Procedure or Analytical Variation:
Product thickness in wells 652 and ~~MW1451-9 are~~ 653 0.03 and 0.05 feet, respectively.
SLW 9/5/13

Variation From Field or Analytical Procedure:
No sample was collected because product thickness was greater than or equal to 0.02 feet.

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Barb Schleiger and John Highstone	Date:	8/~~29~~ 30/13 SW
NAVFAC NW RPM:	Aaron Vernik Aaron S. Vernik	Date:	8/31/13
Project Manager:	Annette Franzen	Date:	8/~~29~~ 30/13 SW
QA Officer/Reviewer:	Sherri Wunderlich Sherri L Wunderlich	Date	8/~~29~~ 30/13 SW

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	66
Site Name:	NMCB Building T-1416 Expanded Area	Location:	NMCB-07, NMCB-10, and NMCB-11
Inspector(s):	A. Lewis, R. Boyd, D. Balmer, E. Roelofs, B. Schleiger and J. Highstone	Date/Time:	8/31/2013 10:46 to 15:32
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Overcast, light rain, 20 mph wind, 53° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Gasoline range organics

Standard Procedure for Field Collection and Laboratory Analysis (cite references):
2013 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 10-1, 17-1, 18-1, and 18-2.

Reason for Change in Field Procedure or Analytical Variation:
Product thickness in wells NMCB-07, NMCB-10, and NMCB-11 are 0.36, 0.14, and 0.03 feet, respectively.

Variation From Field or Analytical Procedure:
No sample was collected from these wells because product thickness was greater than or equal to 0.02 feet. The MS/MSD scheduled for ~~this~~ one well (NMCB-11) will be moved to well 02-451.
SLW 9/5/13 Edited by SLW 9/5/13

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Andy Lewis and Robert Boyd	Date:	8/31/13
NAVFAC NW RPM:	Aaron Vernik Aaron S. Vernik	Date:	9/3/13
Project Manager:	Annette Franzen	Date:	8/31/13
QA Officer/Reviewer:	Sherri Wunderlich Sherri L Wunderlich	Date	8/31/13

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	66
Site Name:	SWMU 25, Roberts Landfill	Location:	RLSW01 & RLSW02
Inspector(s):	Andy Lewis, Robert Boyd	Date/Time:	9/09/2013 09:00 & 11:40
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Clear skies, 5-10 mph wind, 45-53° F		

Material to Be Sampled:
Surface water

Measurement Parameter:
Total and dissolved priority pollutant metals and aluminum, volatile organic compounds, alkalinity, sulfate, total dissolved solids, chemical oxygen demand, total Kjeldahl nitrogen, and ammonia.

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

2013 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix B, Table 4-1, 4-2, and 4-4.

Reason for Change in Field Procedure or Analytical Variation:
These surface water locations were dry.

Variation From Field or Analytical Procedure:
No samples were collected at RLSW01 and RLSW02 because these surface water locations were dry.

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Andy Lewis and Robert Boyd	Date:	9/09/13
NAVFAC NW RPM:	Aaron Vernik Aaron S. Vernik	Date:	9/12/13
Project Manager:	Annette Franzen	Date:	9/09/13
QA Officer/Reviewer:	Sherri Wunderlich Sherri L Wunderlich	Date	9/09/13

APPENDIX C-1

GROUNDWATER SITES DATA SUMMARY TABLE – 1999 THROUGH 2013

Summary of Groundwater Analytical Results 1999 through 2013
TO 66 Groundwater and Landfill Monitoring Report
Former Naval Complex, Adak, Alaska

Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-30	DIN	Lead	ug/l															29.0
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-30	SVOA	Dibenz(a,h)anthracene	ug/l															0.019U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-30	TIN	Lead	ug/l															29.1
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-30	TPH	TPH-Gasoline	ug/l															16000DY
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-30	VOA	Benzene	ug/l															1.4JD
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-30	VOA	Ethylbenzene	ug/l															1100D
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-30	VOA	m,p-Xylene	ug/l															1400D
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-30	VOA	o-Xylene	ug/l															540D
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-30	VOA	Toluene	ug/l															330D
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-31	DIN	Lead	ug/l															2.97
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-31	SVOA	Dibenz(a,h)anthracene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-31	TIN	Lead	ug/l															3.08
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-31	TPH	TPH-Gasoline	ug/l															810Y
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-31	VOA	Benzene	ug/l															0.15J
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-31	VOA	Ethylbenzene	ug/l															0.50U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-31	VOA	m,p-Xylene	ug/l															0.50U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-31	VOA	o-Xylene	ug/l															0.50U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-31	VOA	Toluene	ug/l															0.50U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-32	TPH	TPH-Diesel	ug/l															2100L
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-32	TPH	TPH-Gasoline	ug/l															1900Y
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-32	VOA	Benzene	ug/l															4.6D
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-33	TPH	TPH-Gasoline	ug/l															70J
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-33	VOA	Benzene	ug/l															0.10J
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	2-Methylnaphthalene	ug/l															0.65
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Acenaphthene	ug/l															0.014J
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Acenaphthylene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Anthracene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Benzo(a)anthracene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Benzo(a)pyrene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Benzo(b)fluoranthene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Benzo(g,h,i)perylene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Benzo(k)fluoranthene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Chrysene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Dibenz(a,h)anthracene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Fluoranthene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Fluorene	ug/l															0.034
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Indeno(1,2,3-cd)pyrene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Naphthalene	ug/l															1.3
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Phenanthrene	ug/l															0.020U
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	SVOA	Pyrene	ug/l															0.0084JX
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	TPH	TPH-Diesel	ug/l															300L
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	TPH	TPH-Gasoline	ug/l															690Y
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	VOA	Benzene	ug/l															0.070J
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	VOA	Ethylbenzene	ug/l															49
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	VOA	m,p-Xylene	ug/l															57
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	VOA	o-Xylene	ug/l															10
Area 303	DOWNTOWN HOUSING AREA	WLM	MW-303-37	VOA	Toluene	ug/l															22
Area 303	AREA 303	WLM	MW-303-38	DIN	Lead	ug/l															17.70
Area 303	AREA 303	WLM	MW-303-38	SVOA	Dibenz(a,h)anthracene	ug/l															0.021U
Area 303	AREA 303	WLM	MW-303-38	TIN	Lead	ug/l															18.3
Area 303	AREA 303	WLM	MW-303-38	TPH	TPH-Gasoline	ug/l															4400Y
Area 303	AREA 303	WLM	MW-303-38	VOA	Benzene	ug/l															6.0
Area 303	AREA 303	WLM	MW-303-38	VOA	Ethylbenzene	ug/l															0.77

Summary of Groundwater Analytical Results 1999 through 2013
TO 66 Groundwater and Landfill Monitoring Report
Former Naval Complex, Adak, Alaska

Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Area 303	AREA 303	WLM	MW-303-38	VOA	m,p-Xylene	ug/l															2.5
Area 303	AREA 303	WLM	MW-303-38	VOA	o-Xylene	ug/l															0.42
Area 303	AREA 303	WLM	MW-303-38	VOA	Toluene	ug/l															3.8
Area 303	AREA 303	WLM	MW-303-39	DIN	Lead	ug/l															8.07
Area 303	AREA 303	WLM	MW-303-39	SVOA	Dibenz(a,h)anthracene	ug/l															0.020U
Area 303	AREA 303	WLM	MW-303-39	TIN	Lead	ug/l															7.03
Area 303	AREA 303	WLM	MW-303-39	TPH	TPH-Gasoline	ug/l															1100Y
Area 303	AREA 303	WLM	MW-303-39	VOA	Benzene	ug/l															0.50UJ
Area 303	AREA 303	WLM	MW-303-39	VOA	Ethylbenzene	ug/l															2.6J
Area 303	AREA 303	WLM	MW-303-39	VOA	m,p-Xylene	ug/l															2.8J
Area 303	AREA 303	WLM	MW-303-39	VOA	o-Xylene	ug/l															0.50UJ
Area 303	AREA 303	WLM	MW-303-39	VOA	Toluene	ug/l															0.070J
Area 303	AREA 303	WLM	MW-303-40	DIN	Lead	ug/l															2.43
Area 303	AREA 303	WLM	MW-303-40	SVOA	Dibenz(a,h)anthracene	ug/l															0.020U
Area 303	AREA 303	WLM	MW-303-40	TIN	Lead	ug/l															2.40
Area 303	AREA 303	WLM	MW-303-40	TPH	TPH-Gasoline	ug/l															550Y
Area 303	AREA 303	WLM	MW-303-40	VOA	Benzene	ug/l															0.50U
Area 303	AREA 303	WLM	MW-303-40	VOA	Ethylbenzene	ug/l															1.5
Area 303	AREA 303	WLM	MW-303-40	VOA	m,p-Xylene	ug/l															1.6
Area 303	AREA 303	WLM	MW-303-40	VOA	o-Xylene	ug/l															0.16J
Area 303	AREA 303	WLM	MW-303-40	VOA	Toluene	ug/l															0.060J
Area 303	AREA 303	WLM	MW-303-42	TPH	TPH-Gasoline	ug/l															18000DY
Area 303	AREA 303	WLM	MW-303-42	VOA	Benzene	ug/l															0.92
Area 303	AREA 303	WLM	MW-303-43	TPH	TPH-Gasoline	ug/l															3500Y
Area 303	AREA 303	WLM	MW-303-44	TPH	TPH-Gasoline	ug/l															3800Y
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	DIN	Lead	ug/l	1U	0.1U	0.3U	0.1U											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	TIN	Lead	ug/l	1U	0.3U	2U	0.15U											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	TPH	C10-C25 Aliphatics	ug/l				53J											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	TPH	C10-C25 Aromatics	ug/l				430											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	TPH	C6-C10 Aliphatics	ug/l				36U											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	TPH	C6-C10 Aromatics	ug/l				440											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	TPH	GRO - Aliphatic Fraction	ug/l			90U												
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	TPH	GRO - Aromatic Fraction	ug/l			585												
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	TPH	TPH-Diesel	ug/l			10700	8700	14000	7080	11200J	8700	7000Y	9300Y	8700Y	7100Y	10000Y	9400YJ	12000Y
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	TPH	TPH-Gasoline	ug/l			568	410											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	TPH	TPH-Heavy Fraction/Oil	ug/l			1470	2000	2900	1310	1130J	2000U	660L	890L					
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	VOA	Benzene	ug/l			0.659	0.59J											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	VOA	Ethylbenzene	ug/l			15	10											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	VOA	m,p-Xylene	ug/l			60.8												
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	VOA	o-Xylene	ug/l			46.7												
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	VOA	Toluene	ug/l			3.06	2.9											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-118	VOA	Xylenes	ug/l				81											
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-150	TPH	TPH-Diesel	ug/l					770	394	927J	1400	1100Y	3400Y	1100Y	1300Y	1400Y	1300YJ	1400Y
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-150	TPH	TPH-Heavy Fraction/Oil	ug/l					210U	500U									
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	2-Methylnaphthalene	ug/l									2.7	4.0	8.9	9	17D		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Acenaphthene	ug/l									0.65	0.73	1.0	0.9	0.75		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Acenaphthylene	ug/l									0.11U	0.15 U	0.25U	0.19U	0.16U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Anthracene	ug/l									0.039	0.023	0.035	0.035	0.028U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Benzo(a)anthracene	ug/l									0.020U	0.020 U	0.020 U	0.020U	0.020U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Benzo(a)pyrene	ug/l									0.020U	0.020 U	0.0033J	0.020U	0.020U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Benzo(b)fluoranthene	ug/l									0.020U	0.020 U	0.0041J	0.0031J	0.020U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Benzo(g,h,i)perylene	ug/l									0.020U	0.020 U	0.020 U	0.020U	0.020U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Benzo(k)fluoranthene	ug/l									0.020U	0.020 U	0.0030J	0.020U	0.020U		

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Chrysene	ug/l									0.020U	0.020 U	0.020 U	0.020U	0.020U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Dibenz(a,h)anthracene	ug/l									0.020U	0.020 U	0.0044J	0.020U	0.020U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Fluoranthene	ug/l									0.015J	0.014 J	0.024	0.019J	0.020U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Fluorene	ug/l									2.4	2.9	4.0	3.2	2.8		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Indeno(1,2,3-cd)pyrene	ug/l									0.020U	0.020 U	0.020 U	0.0038J	0.020U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Naphthalene	ug/l									7.0	9.6	13D	12D	20D		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Phenanthrene	ug/l									1.7	1.3	1.4	1.1	1.4		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	SVOA	Pyrene	ug/l									0.023	0.019 J	0.027	0.018J	0.020U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	TPH	TPH-Diesel	ug/l					2300	1590	2840J	4100	3500Y	3400Y	3000Y	4600Y	3900Y		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	TPH	TPH-Heavy Fraction/Oil	ug/l					250U	500U									
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	VOA	Benzene	ug/l									0.50U	0.50U	0.060J	0.50U	0.50U		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	VOA	Ethylbenzene	ug/l									2.6	3.3	3.0	2.8	3.2		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	VOA	Toluene	ug/l									0.26J	0.60U	0.50U	0.50U	0.14J		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	VOA	m,p-Xylene	ug/l									1.3	2.2	2.2	2	3.1		
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	01-151	VOA	o-Xylene	ug/l									0.40J	0.54	1.5	0.81	1.1		
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	TPH	TPH-Diesel	ug/l				160U	100U	250U									
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	TPH	TPH-Gasoline	ug/l				8.2J	16U	80U									
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	TPH	TPH-Heavy Fraction/Oil	ug/l				120J											
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	VOA	Benzene	ug/l				1U	2U	0.5U									
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	VOA	Ethylbenzene	ug/l				1U	2U	0.5U									
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	VOA	m,p-Xylene	ug/l					2U										
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	VOA	o-Xylene	ug/l					2U										
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	VOA	Toluene	ug/l				1U	2U	0.5U									
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	VOA	Xylenes	ug/l				3U		1U									
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-1	TPH	TPH-Diesel	ug/l															5600Y
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	2-Methylnaphthalene	ug/l															1.2
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Acenaphthene	ug/l															1.3D
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Acenaphthylene	ug/l															0.21U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Anthracene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Benzo(a)anthracene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Benzo(a)pyrene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Benzo(b)fluoranthene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Benzo(g,h,i)perylene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Benzo(k)fluoranthene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Chrysene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Dibenz(a,h)anthracene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Fluoranthene	ug/l															0.020X
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Fluorene	ug/l															4.9D
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Indeno(1,2,3-cd)pyrene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Naphthalene	ug/l															7.2
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Phenanthrene	ug/l															0.25
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	SVOA	Pyrene	ug/l															0.029X
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	TPH	TPH-Diesel	ug/l															6200Y
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	VOA	Benzene	ug/l															0.23J
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	VOA	Ethylbenzene	ug/l															2.5
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	VOA	m,p-Xylene	ug/l															3.0
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	VOA	o-Xylene	ug/l															0.63
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-2	VOA	Toluene	ug/l															0.19J
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	2-Methylnaphthalene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Acenaphthene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Acenaphthylene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Anthracene	ug/l															0.019U

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Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Benzo(a)anthracene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Benzo(a)pyrene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Benzo(b)fluoranthene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Benzo(g,h,i)perylene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Benzo(k)fluoranthene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Chrysene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Dibenz(a,h)anthracene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Fluoranthene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Fluorene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Indeno(1,2,3-cd)pyrene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Naphthalene	ug/l															0.026X
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Phenanthrene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	SVOA	Pyrene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	TPH	TPH-Diesel	ug/l															1300Y
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	VOA	Benzene	ug/l															0.50UJ
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	VOA	Ethylbenzene	ug/l															0.50UJ
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	VOA	m,p-Xylene	ug/l															0.50UJ
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	VOA	o-Xylene	ug/l															0.50UJ
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-3	VOA	Toluene	ug/l															0.50UJ
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	2-Methylnaphthalene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Acenaphthene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Acenaphthylene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Anthracene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Benzo(a)anthracene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Benzo(a)pyrene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Benzo(b)fluoranthene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Benzo(g,h,i)perylene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Benzo(k)fluoranthene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Chrysene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Dibenz(a,h)anthracene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Fluoranthene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Fluorene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Indeno(1,2,3-cd)pyrene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Naphthalene	ug/l															0.047
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Phenanthrene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	SVOA	Pyrene	ug/l															0.019U
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	TPH	TPH-Diesel	ug/l															160Y
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	VOA	Benzene	ug/l															0.50UJ
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	VOA	Ethylbenzene	ug/l															0.50UJ
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	VOA	m,p-Xylene	ug/l															0.50UJ
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	VOA	o-Xylene	ug/l															0.50UJ
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-4	VOA	Toluene	ug/l															0.50UJ
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-5	TPH	TPH-Diesel	ug/l															3700Y
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-6	TPH	TPH-Diesel	ug/l															5600Y
Former Power Plant, Building T-1451	Former Power Plant Building T-1451	WLM	MW-1451-8	TPH	TPH-Diesel	ug/l															2600Y
GCI Compound, UST GC-1	GCI COMPOUND, UST GCI-1	WLM	04-100	TPH	TPH-Diesel	ug/l					430	376	440J	370	210Y	270Z				230L	
GCI Compound, UST GC-1	GCI COMPOUND, UST GCI-1	WLM	04-100	TPH	TPH-Gasoline	ug/l					1600	5300J	4420J	5200J	4400Y	4000Z	4400Z	3100Y	2900Y	3800Y	2900Y
GCI Compound, UST GC-1	GCI COMPOUND, UST GCI-1	WLM	04-100	VOA	Benzene	ug/l					2U	0.95	0.95	1.0U	1.2J	1.2UJ	1.0	1.0U			
GCI Compound, UST GC-1	GCI COMPOUND, UST GCI-1	WLM	04-100	VOA	Ethylbenzene	ug/l					1.6J	13.1	12.7J	13	18J	10J					
GCI Compound, UST GC-1	GCI COMPOUND, UST GCI-1	WLM	04-100	VOA	m,p-Xylene	ug/l					1.9J			30	40J	23J					
GCI Compound, UST GC-1	GCI COMPOUND, UST GCI-1	WLM	04-100	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
GCI Compound, UST GC-1	GCI COMPOUND, UST GCI-1	WLM	04-100	VOA	o-Xylene	ug/l					2U			5.8	7.0J	3.9J					
GCI Compound, UST GC-1	GCI COMPOUND, UST GCI-1	WLM	04-100	VOA	Toluene	ug/l					0.98J	2.44	2.3J	1.9	2.3J	3.3 UJ					

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GCI Compound, UST GC-1	GCI COMPOUND, UST GCI-1	WLM	04-100	VOA	Xylenes	ug/l						26.6	33.4J	35.8	47J	26.9J					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-201	TPH	DRO - Aliphatic Fraction	ug/l				53J											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-201	TPH	DRO - Aromatic Fraction	ug/l				42J											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-201	TPH	GRO - Aliphatic Fraction	ug/l				2400											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-201	TPH	GRO - Aromatic Fraction	ug/l				150											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-201	TPH	TPH-Diesel	ug/l				290											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-201	TPH	TPH-Gasoline	ug/l				2600											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-201	VOA	Benzene	ug/l				5.2											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-201	VOA	Ethylbenzene	ug/l				7.8											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-201	VOA	Toluene	ug/l				1.6											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-201	VOA	Xylenes	ug/l				33											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-202	TPH	TPH-Diesel	ug/l				660										870L	
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-202	TPH	TPH-Gasoline	ug/l				5100						4400Y	5200Y	3300Y		3400Y	4100Y
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-202	VOA	Benzene	ug/l				8.7						2.9J	2.5J	0.77			
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-202	VOA	Ethylbenzene	ug/l				90						19J					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-202	VOA	Toluene	ug/l				53						8.3J					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-202	VOA	Xylenes	ug/l				310						160J					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-202	VOA	m,p-Xylene	ug/l										150J					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-202	VOA	o-Xylene	ug/l										10J					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-203	TPH	DRO - Aliphatic Fraction	ug/l				42J											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-203	TPH	DRO - Aromatic Fraction	ug/l				87											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-203	TPH	GRO - Aliphatic Fraction	ug/l				2200											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-203	TPH	GRO - Aromatic Fraction	ug/l				540											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-203	TPH	TPH-Diesel	ug/l				320											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-203	TPH	TPH-Gasoline	ug/l				2800											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-203	VOA	Benzene	ug/l				14											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-203	VOA	Ethylbenzene	ug/l				90											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-203	VOA	Toluene	ug/l				19											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-203	VOA	Xylenes	ug/l				280											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-204	TPH	TPH-Diesel	ug/l				170U				68				1700Y	3200Y	360YJ	
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-204	TPH	TPH-Gasoline	ug/l				110				230	380Y	230Y	250Z	300Y	410Y	200Y	490Y
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-204	VOA	Benzene	ug/l				1U				1.0U	0.78	0.42J	0.090J				
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-204	VOA	Ethylbenzene	ug/l				1U				1.0U	6.2	2.6					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-204	VOA	Toluene	ug/l				1U				1.0U	2.3	0.50U					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-204	VOA	Xylenes	ug/l				3U				3.0U	6.3	0.68J					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-204	VOA	m,p-Xylene	ug/l								2.0U	4.0	0.61					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-204	VOA	o-Xylene	ug/l								1.0U	2.3	0.070J					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-207	TPH	TPH-Diesel	ug/l				2700											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-207	TPH	TPH-Gasoline	ug/l				1700											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-207	VOA	Benzene	ug/l				2.3											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-207	VOA	Ethylbenzene	ug/l				9.4											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-207	VOA	Toluene	ug/l				2.8											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-207	VOA	Xylenes	ug/l				32											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	TPH	DRO - Aliphatic Fraction	ug/l				61J											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	TPH	DRO - Aromatic Fraction	ug/l				80J											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	TPH	GRO - Aliphatic Fraction	ug/l				4300											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	TPH	GRO - Aromatic Fraction	ug/l				650											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	TPH	TPH-Diesel	ug/l				420										430L	
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	TPH	TPH-Gasoline	ug/l				5000			4580J	6400	8300DY	6100Y	6800Y	4800Y	4700Y	6300Y	5500Y
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	VOA	Benzene	ug/l				12			5.66J	1.0U	6.3 J	5.0D	4.3J				
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	VOA	Ethylbenzene	ug/l				110			127J	120	170DJ	130D					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	VOA	m,p-Xylene	ug/l								320	470DJ	350D					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	VOA	o-Xylene	ug/l								85	120DJ	91D					

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GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	VOA	Toluene	ug/l				29			81.5J	59	230DJ	110D					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-210	VOA	Xylenes	ug/l				330			331J	405	590DJ	441D					
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-211	TPH	TPH-Diesel	ug/l				190											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-211	TPH	TPH-Gasoline	ug/l				2500											3000Y
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-211	VOA	Benzene	ug/l				6.9											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-211	VOA	Ethylbenzene	ug/l				18											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-211	VOA	Toluene	ug/l				5											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-211	VOA	Xylenes	ug/l				47											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-213	TPH	TPH-Diesel	ug/l				150J				170						140LJ	
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-213	TPH	TPH-Gasoline	ug/l				4000				3800J	5900Y	6900Z	4400Z	3300Y	4000Y	3900Y	3200Y
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-213	VOA	Benzene	ug/l				3				1.0U							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-213	VOA	Ethylbenzene	ug/l				5.4				3.8							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-213	VOA	m,p-Xylene	ug/l								7.9							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-213	VOA	o-Xylene	ug/l								1.0U							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-213	VOA	Toluene	ug/l				3.6				1.0U							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-213	VOA	Xylenes	ug/l				14				7.9							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	C10-C24 Aliphatics	ug/l	100U	79U													
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	C10-C24 Aromatics	ug/l	120	79U													
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	C25-C36 Aromatics	ug/l	100U	78U													
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	C6-C9 Aromatics	ug/l	20U	20U													
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	GRO - Aliphatic Fraction	ug/l			162	6.7J											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	GRO - Aromatic Fraction	ug/l			30U	14U											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	TPH-Diesel	ug/l	170	160U	595U	160U											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	TPH-Gasoline	ug/l	25	20U	184	7.9J	290	199	547	420J		700Y		230Y		100Y	100U
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	TPH	TPH-Heavy Fraction/Oil	ug/l			1190U	170J											
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	VOA	Aggregate TPH	ug/l		0.2													
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	VOA	Benzene	ug/l	0.4U	0.2U	1.35	2	1.1J	1.72	0.77	0.94J		0.60UJ		0.58			
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	VOA	BTEX (total)	ug/l	0.8U	0.2													
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	VOA	Ethylbenzene	ug/l	0.4U	0.2U	2U	9.8	6.3	10.2	1.35	5.7							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	VOA	m,p-Xylene	ug/l	0.8U	0.4U	2.49		11			8.6							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	VOA	o-Xylene	ug/l	0.88	0.2UJ	2U		1.21J			1.3							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	VOA	Toluene	ug/l	0.6U	0.3U	2U	2.9	1.9J	1.98	0.52	2.0							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	VOA	Xylenes	ug/l				13		6.51	3	9.9							
GCI Compound, UST GC-1	EAST RUNWAY AREA	WLM	04-701	VOA	Xylenes (total)	ug/l	0.8U	0.2						9.9							
GCI Compound, UST GC-1	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW9	TPH	TPH-Diesel	ug/l				76J				140					78Y		
GCI Compound, UST GC-1	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW9	TPH	TPH-Gasoline	ug/l				31J				140							
GCI Compound, UST GC-1	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW9	VOA	Benzene	ug/l				0.77J				0.83J							
GCI Compound, UST GC-1	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW9	VOA	Ethylbenzene	ug/l				1U				1.0U							
GCI Compound, UST GC-1	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW9	VOA	Toluene	ug/l				1U				1.0U							
GCI Compound, UST GC-1	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW9	VOA	Xylenes	ug/l				3U				3.0U							
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-416	TPH	TPH-Diesel	ug/l			3450		790	1160		1500		1400Y		1300Y			1600Y
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-416	TPH	TPH-Gasoline	ug/l			81.3												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-416	TPH	TPH-Heavy Fraction/Oil	ug/l					210U	500U									
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-416	VOA	Benzene	ug/l			0.765												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-416	VOA	Ethylbenzene	ug/l			9.62												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-416	VOA	Toluene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-416	VOA	Xylenes	ug/l			3.26												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	TPH	C10-C24 Aliphatics	ug/l	100U	80U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	TPH	C10-C24 Aromatics	ug/l	250U	110J													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	TPH	C25-C36 Aliphatics	ug/l	100U	60U													

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Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	TPH	C25-C36 Aromatics	ug/l	100U	80U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	TPH	C6-C9 Aromatics	ug/l	20U	20U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	TPH	TPH-Diesel	ug/l	280U	160UJ	12300	4900	4900	5450	5650J	3800	2400Y	3300Y	2200Y		4300Y		3300Y
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	TPH	TPH-Gasoline	ug/l	20U	20U	50U	20.6J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	TPH	TPH-Heavy Fraction/Oil	ug/l				1200	610	341J									
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	VOA	Benzene	ug/l	0.4U	0.2U	0.2U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	VOA	BTEX (total)	ug/l	0.8U														
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	VOA	Ethylbenzene	ug/l	0.4U	0.2U	0.5U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	VOA	m,p-Xylene	ug/l	0.8U	0.4U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	VOA	o-Xylene	ug/l	0.56	0.2U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	VOA	Toluene	ug/l	0.6U	0.3U	0.5U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	VOA	Xylenes	ug/l			1U	1.43J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-420	VOA	Xylenes (total)	ug/l	0.8U														
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Acenaphthene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Acenaphthylene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Anthracene	ug/l			1.14												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Benzo(a)anthracene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Benzo(a)pyrene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Benzo(b)fluoranthene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Benzo(g,h,i)perylene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Benzo(k)fluoranthene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Chrysene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Dibenz(a,h)anthracene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Fluoranthene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Fluorene	ug/l			3.6												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Naphthalene	ug/l			86.3												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Phenanthrene	ug/l			1.9												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	SVOA	Pyrene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	TPH	C10-C24 Aliphatics	ug/l	430J	100J													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	TPH	C10-C24 Aromatics	ug/l	1300J	1700J													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	TPH	C25-C36 Aliphatics	ug/l	100U	61UJ													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	TPH	C25-C36 Aromatics	ug/l	100U	81U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	TPH	C6-C9 Aliphatics	ug/l	200U	120													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	TPH	C6-C9 Aromatics	ug/l	370	410													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	TPH	TPH-Diesel	ug/l	1800UJ	1800J	81300J	3500							15000Y	3800Y	19000Y		3000Y
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	TPH	TPH-Gasoline	ug/l	530	540	282	172											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	TPH	TPH-Heavy Fraction/Oil	ug/l				240J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,1,1-Trichloroethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,1,2,2-Tetrachloroethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,1,2-Trichloroethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,1-Dichloroethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,1-Dichloroethene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,1-Dichloropropene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,2,3-Trichlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,2,3-Trichloropropane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,2,4-Trichlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,2,4-Trimethylbenzene	ug/l			24												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,2-Dibromo-3-chloropropane	ug/l			5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,2-Dibromoethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,2-Dichlorobenzene	ug/l			1U												

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Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,2-Dichloroethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,2-Dichloropropane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,3,5-Trimethylbenzene	ug/l			18.7												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,3-Dichlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,3-Dichloropropane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	1,4-Dichlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	2,2-Dichloropropane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	2-Butanone	ug/l			249												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	2-Chlorotoluene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	2-Hexanone	ug/l			10U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	4-Chlorotoluene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	4-Isopropyltoluene	ug/l			4.45												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	4-Methyl-2-pentanone	ug/l			10U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Acetone	ug/l			25U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Benzene	ug/l	2U	0.4U	0.5U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Bromobenzene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Bromochloromethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Bromodichloromethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Bromoform	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Bromomethane	ug/l			2UJ												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	BTEX (total)	ug/l	52.3	77.3													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Carbon disulfide	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Carbon tetrachloride	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Chlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Chloroethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Chloroform	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Chloromethane	ug/l			5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	cis-1,2-Dichloroethene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	cis-1,3-Dichloropropene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Dibromochloromethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Dibromomethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Dichlorodifluoromethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Ethylbenzene	ug/l	2U	2.3	1U	0.59J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Hexachlorobutadiene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Isopropylbenzene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	m,p-Xylene	ug/l	17	25	3.39												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Methylene chloride	ug/l			5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Naphthalene	ug/l			29.3												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	n-Butylbenzene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	n-Propylbenzene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	o-Xylene	ug/l	45	46	11.5												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	sec-Butylbenzene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Styrene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	tert-Butylbenzene	ug/l			13.2												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Tetrachloroethene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Toluene	ug/l	5.7	4	1U	0.59J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	trans-1,2-Dichloroethene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	trans-1,3-Dichloropropene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Trichloroethene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Trichlorofluoromethane	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Vinyl chloride	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Xylenes	ug/l			14J	5.86											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-421	VOA	Xylenes (total)	ug/l	47	46													

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Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Acenaphthene	ug/l			1.32												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Acenaphthylene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Anthracene	ug/l			4.16												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Benzo(a)anthracene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Benzo(a)pyrene	ug/l			5.48												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Benzo(b)fluoranthene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Benzo(g,h,i)perylene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Benzo(k)fluoranthene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Chrysene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Dibenz(a,h)anthracene	ug/l			6.24												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Fluoranthene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Fluorene	ug/l			6.81												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			6.99												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Naphthalene	ug/l			86.2												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Phenanthrene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	SVOA	Pyrene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	TPH	C10-C24 Aliphatics	ug/l	3000J	550J													
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	TPH	C10-C24 Aromatics	ug/l	2700J	2600J													
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	TPH	C25-C36 Aliphatics	ug/l	6000J	59UJ													
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	TPH	C25-C36 Aromatics	ug/l	400J	78U													
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	TPH	C6-C9 Aliphatics	ug/l	290	370													
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	TPH	C6-C9 Aromatics	ug/l	1300	1300													
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	TPH	TPH-Diesel	ug/l	5600J	3100J	90600J	16000							44000YJ	10000Y	13000Y		11000Y
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	TPH	TPH-Gasoline	ug/l	1600	1600	2090J	2400											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	TPH	TPH-Heavy Fraction/Oil	ug/l				1400J											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,1,1-Trichloroethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,1,2,2-Tetrachloroethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,1,2-Trichloroethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,1-Dichloroethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,1-Dichloroethene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,1-Dichloropropene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,2,3-Trichlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,2,3-Trichloropropane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,2,4-Trichlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,2,4-Trimethylbenzene	ug/l			422												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,2-Dibromo-3-chloropropane	ug/l			5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,2-Dibromoethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,2-Dichlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,2-Dichloroethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,2-Dichloropropane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,3,5-Trimethylbenzene	ug/l			112												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,3-Dichlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,3-Dichloropropane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	1,4-Dichlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	2,2-Dichloropropane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	2-Butanone	ug/l			115												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	2-Chlorotoluene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	2-Hexanone	ug/l			10U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	4-Chlorotoluene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	4-Isopropyltoluene	ug/l			32.7												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	4-Methyl-2-pentanone	ug/l			10U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Acetone	ug/l			135												

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Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Benzene	ug/l	6.9	3.5	3.94	2.1											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Bromobenzene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Bromochloromethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Bromodichloromethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Bromoform	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Bromomethane	ug/l			2U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	BTEX (total)	ug/l	333.9														
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Carbon disulfide	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Carbon tetrachloride	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Chlorobenzene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Chloroethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Chloroform	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Chloromethane	ug/l			5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	cis-1,2-Dichloroethene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	cis-1,3-Dichloropropene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Dibromochloromethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Dibromomethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Dichlorodifluoromethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Ethylbenzene	ug/l	48	50	45.6	34											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Hexachlorobutadiene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Isopropylbenzene	ug/l			17.8												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	m,p-Xylene	ug/l	120	130	115												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Methylene chloride	ug/l			5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Naphthalene	ug/l			235												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	n-Butylbenzene	ug/l			180												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	n-Propylbenzene	ug/l			47.3												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	o-Xylene	ug/l	120	90	103												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	sec-Butylbenzene	ug/l			16.3												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Styrene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	tert-Butylbenzene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Tetrachloroethene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Toluene	ug/l	42	28	35.6	16											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	trans-1,2-Dichloroethene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	trans-1,3-Dichloropropene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Trichloroethene	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Trichlorofluoromethane	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Vinyl chloride	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Xylenes	ug/l			194	130											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	03-890	VOA	Xylenes (total)	ug/l	240														
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-01	TPH	C10-C25 Aliphatics	ug/l				54J											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-01	TPH	C10-C25 Aromatics	ug/l				53J											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-01	TPH	TPH-Diesel	ug/l			1190J	320	420	472		660							
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-01	TPH	TPH-Gasoline	ug/l			71.4												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-01	TPH	TPH-Heavy Fraction/Oil	ug/l				280	320U	500U									
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-01	VOA	Benzene	ug/l			0.633												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-01	VOA	Ethylbenzene	ug/l			0.538												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-01	VOA	Toluene	ug/l			0.5J												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-01	VOA	Xylenes	ug/l			2.12J												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	2-Methylnaphthalene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Acenaphthene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Acenaphthylene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Anthracene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Benzo(a)anthracene	ug/l															0.020U

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Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Benzo(a)pyrene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Benzo(b)fluoranthene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Benzo(g,h,i)perylene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Benzo(k)fluoranthene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Chrysene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Dibenz(a,h)anthracene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Fluoranthene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Fluorene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Indeno(1,2,3-cd)pyrene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Naphthalene	ug/l															0.075
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Phenanthrene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	SVOA	Pyrene	ug/l															0.020U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	Benzene	ug/l			0.2U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	C10-C24 Aliphatics	ug/l	100U	82UJ													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	C10-C24 Aromatics	ug/l	100U	82UJ													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	C25-C36 Aliphatics	ug/l	100U	61UJ													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	C25-C36 Aromatics	ug/l	100U	82UJ													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	C6-C9 Aliphatics	ug/l	20UJ	20U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	C6-C9 Aromatics	ug/l	20U	20U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	Ethylbenzene	ug/l			0.5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	GRO - Aliphatic Fraction	ug/l			90U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	GRO - Aromatic Fraction	ug/l			30U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	Toluene	ug/l			0.5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	TPH-Diesel	ug/l	160UJ	160UJ	549U	160U											16J
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	TPH-Gasoline	ug/l	20U	20U	90U	50U											100U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	TPH-Heavy Fraction/Oil	ug/l			1100U	280U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	Xylenes	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U											0.50U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	BTEX (total)	ug/l	0.4U														2.5U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U											0.50U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U												0.50U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	o-Xylene	ug/l	0.2U	0.2UJ	2U												0.50U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U											0.50U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	Xylenes	ug/l				3U											1.0U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	Xylenes (total)	ug/l	0.4U														1.0U
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	TPH	C10-C24 Aliphatics	ug/l	100U	80U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	TPH	C10-C24 Aromatics	ug/l	100U	80UJ													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	TPH	C25-C36 Aliphatics	ug/l	100U	59U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	TPH	C25-C36 Aromatics	ug/l	100U	79U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	TPH	C6-C9 Aromatics	ug/l	20U	20U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	TPH	TPH-Diesel	ug/l	160U	160UJ	663J	94J								120Y			
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	TPH	TPH-Gasoline	ug/l	20U	20U	50U	13.3J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	TPH	TPH-Heavy Fraction/Oil	ug/l				170J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	VOA	Benzene	ug/l	0.4U	0.2U	0.2U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	VOA	BTEX (total)	ug/l	0.8U														
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	VOA	Ethylbenzene	ug/l	0.4U	0.2U	0.5U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	VOA	m,p-Xylene	ug/l	0.8U	0.4U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	VOA	o-Xylene	ug/l	0.4U	0.2U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	VOA	Toluene	ug/l	0.6U	0.3U	0.5U	0.51J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	VOA	Xylenes	ug/l			1U	3U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-422	VOA	Xylenes (total)	ug/l	0.8U														
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	GW	03-562	TPH	Benzene	ug/l			0.2U												

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Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	GW	03-562	TPH	Ethylbenzene	ug/l			0.5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	GW	03-562	TPH	Toluene	ug/l			0.5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	GW	03-562	TPH	TPH-Diesel	ug/l			100U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	GW	03-562	TPH	TPH-Gasoline	ug/l			50U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	GW	03-562	TPH	Xylenes	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	C10-C24 Aliphatics	ug/l	81	79U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	C10-C24 Aromatics	ug/l	130	79UJ													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	C25-C36 Aliphatics	ug/l	50U	59UJ													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	C25-C36 Aromatics	ug/l	70U	79U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	C6-C9 Aromatics	ug/l	20U	20U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	GRO - Aliphatic Fraction	ug/l			90U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	GRO - Aromatic Fraction	ug/l			30U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	TPH-Diesel	ug/l	210	160U	959	740											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	TPH-Gasoline	ug/l	20U	20U	90U	50U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	TPH	TPH-Heavy Fraction/Oil	ug/l			1230U	670											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	VOA	BTEX (total)	ug/l	0.2														
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	VOA	o-Xylene	ug/l	0.2U	0.2U	2U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	VOA	Xylenes	ug/l				3U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-695	VOA	Xylenes (total)	ug/l	0.2														
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WL	03-886	TPH	Benzene	ug/l			1.96J												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WL	03-886	TPH	Ethylbenzene	ug/l			26.7J												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WL	03-886	TPH	Toluene	ug/l			5.05J												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WL	03-886	TPH	TPH-Diesel	ug/l			6700												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WL	03-886	TPH	TPH-Gasoline	ug/l			443J												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WL	03-886	TPH	Xylenes	ug/l			106J												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WL	03-886	VOA	Benzene	ug/l			1.25J												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	C10-C24 Aliphatics	ug/l	100U	78UJ													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	C10-C24 Aromatics	ug/l	210UJ	480J													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	C25-C36 Aromatics	ug/l	100U	77U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	C6-C9 Aliphatics	ug/l	20UJ	24													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	C6-C9 Aromatics	ug/l	20U	20U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	GRO - Aliphatic Fraction	ug/l			90U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	GRO - Aromatic Fraction	ug/l			30U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	TPH-Diesel	ug/l	270UJ	480	543U	160U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	TPH-Gasoline	ug/l	21	28	90U	35J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	TPH	TPH-Heavy Fraction/Oil	ug/l			1090U	220J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	VOA	BTEX (total)	ug/l	0.6														
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	0.64J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	VOA	m,p-Xylene	ug/l	0.41	0.74J	2U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	VOA	o-Xylene	ug/l	0.2U	0.2UJ	2U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	VOA	Xylenes	ug/l				3U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-896	VOA	Xylenes (total)	ug/l	0.6														
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	C10-C24 Aliphatics	ug/l	100U	80UJ													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	C10-C24 Aromatics	ug/l	361	490J													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	C25-C36 Aliphatics	ug/l	100U	59U													

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Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	C25-C36 Aromatics	ug/l	100U	78U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	C6-C9 Aliphatics	ug/l	20UJ	47													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	C6-C9 Aromatics	ug/l	71	100													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	GRO - Aliphatic Fraction	ug/l			90U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	GRO - Aromatic Fraction	ug/l			72.3												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	TPH-Diesel	ug/l	390UJ	560J	969	730											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	TPH-Gasoline	ug/l	91	150	100	220											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	TPH	TPH-Heavy Fraction/Oil	ug/l			1110U	180J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	VOA	Benzene	ug/l	0.98J	0.98	0.5U	0.39J											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	VOA	BTEX (total)	ug/l	19.79														
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	VOA	Ethylbenzene	ug/l	15	9.9	6.92	14											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	VOA	m,p-Xylene	ug/l	3.4J	3.7	2.57												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	VOA	o-Xylene	ug/l	0.41J	0.27	2U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	VOA	Toluene	ug/l	0.3UJ	0.3U	2U	1U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	VOA	Xylenes	ug/l				5.3											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-897	VOA	Xylenes (total)	ug/l	3.81														
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-13	TPH	Benzene	ug/l			0.2U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-13	TPH	Ethylbenzene	ug/l			0.5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-13	TPH	Toluene	ug/l			0.5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-13	TPH	TPH-Diesel	ug/l			100U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-13	TPH	TPH-Gasoline	ug/l			50U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-13	TPH	Xylenes	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-16	TPH	Benzene	ug/l			0.2U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-16	TPH	Ethylbenzene	ug/l			0.5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-16	TPH	Toluene	ug/l			0.5U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-16	TPH	TPH-Diesel	ug/l			100U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-16	TPH	TPH-Gasoline	ug/l			50U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	MW-303-16	TPH	Xylenes	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-02	TPH	C10-C25 Aliphatics	ug/l				31J											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-02	TPH	C10-C25 Aromatics	ug/l				84U											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-02	TPH	TPH-Diesel	ug/l			455J	98J								98U			
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-02	TPH	TPH-Gasoline	ug/l			50U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-02	TPH	TPH-Heavy Fraction/Oil	ug/l				330											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-02	VOA	Benzene	ug/l			0.2U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-02	VOA	Ethylbenzene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-02	VOA	Toluene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-02	VOA	Xylenes	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-03	TPH	TPH-Diesel	ug/l			150J												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-03	TPH	TPH-Gasoline	ug/l			50U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-03	VOA	Benzene	ug/l			0.2U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-03	VOA	Ethylbenzene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-03	VOA	Toluene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-03	VOA	Xylenes	ug/l			1.01												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-04	TPH	TPH-Diesel	ug/l			143J												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-04	TPH	TPH-Gasoline	ug/l			50U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-04	VOA	Benzene	ug/l			0.2U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-04	VOA	Ethylbenzene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-04	VOA	Toluene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-04	VOA	Xylenes	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-05	TPH	TPH-Diesel	ug/l			265J	160U											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-05	TPH	TPH-Gasoline	ug/l			50U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-05	TPH	TPH-Heavy Fraction/Oil	ug/l				280U											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-05	VOA	Benzene	ug/l			0.2U												

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Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-05	VOA	Ethylbenzene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-05	VOA	Toluene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-05	VOA	Xylenes	ug/l			1U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-06	TPH	TPH-Diesel	ug/l			250J	74J								48U			
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-06	TPH	TPH-Gasoline	ug/l			50U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-06	TPH	TPH-Heavy Fraction/Oil	ug/l				190J											
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-06	VOA	Benzene	ug/l			0.2U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-06	VOA	Ethylbenzene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-06	VOA	Toluene	ug/l			0.5U												
Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-06	VOA	Xylenes	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	RW	DW-134-2	TPH	Benzene	ug/l			1.14												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	RW	DW-134-2	TPH	Ethylbenzene	ug/l			9.95												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	RW	DW-134-2	TPH	Toluene	ug/l			1U												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	RW	DW-134-2	TPH	TPH-Diesel	ug/l			5840												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	RW	DW-134-2	TPH	TPH-Gasoline	ug/l			264												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	RW	DW-134-2	TPH	Xylenes	ug/l			30.6												
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	RW	DW-134-2	VOA	Benzene	ug/l			0.894J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	TPH	TPH-Diesel	ug/l			1490												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	TPH	TPH-Gasoline	ug/l			3800J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	TPH	TPH-Heavy Fraction/Oil	ug/l			750U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,1,1,2-Tetrachloroethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,1,1-Trichloroethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,1,2,2-Tetrachloroethane	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,1,2-Trichloroethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,1-Dichloroethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,1-Dichloroethene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,1-Dichloropropene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,2,3-Trichlorobenzene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,2,3-Trichloropropane	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,2,4-Trichlorobenzene	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,2,4-Trimethylbenzene	ug/l				6.15											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,2-Dibromo-3-chloropropane	ug/l				2.5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,2-Dibromoethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,2-Dichlorobenzene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,2-Dichloroethane	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,2-Dichloropropane	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,3,5-Trimethylbenzene	ug/l				14.9											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,3-Dichlorobenzene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,3-Dichloropropane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	1,4-Dichlorobenzene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	2,2-Dichloropropane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	2-Butanone	ug/l				50U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	2-Chloroethyl vinyl ether	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	2-Chlorotoluene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	2-Hexanone	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	4-Chlorotoluene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	4-Isopropyltoluene	ug/l				9.06											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	4-Methyl-2-pentanone	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Benzene	ug/l				0.5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Bromobenzene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Bromochloromethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Bromodichloromethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Bromoform	ug/l				1U											

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NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Bromomethane	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Carbon disulfide	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Carbon tetrachloride	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Chlorobenzene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Chloroethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Chloroform	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Chloromethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	cis-1,2-Dichloroethene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	cis-1,3-Dichloropropene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Dibromochloromethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Dibromomethane	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Dichlorodifluoromethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Ethylbenzene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Hexachlorobutadiene	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Isopropylbenzene	ug/l				1.61											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	m,p-Xylene	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Methylene chloride	ug/l				5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Naphthalene	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	n-Butylbenzene	ug/l				2.59											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	n-Propylbenzene	ug/l				4.57											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	o-Xylene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	sec-Butylbenzene	ug/l				4.07											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Styrene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	tert-Butylbenzene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Tetrachloroethene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Toluene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	trans-1,2-Dichloroethene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	trans-1,3-Dichloropropene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Trichloroethene	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Trichlorofluoromethane	ug/l				1U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-301	VOA	Vinyl chloride	ug/l				2U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-451	DIN	Lead	ug/l									0.149	0.030UJ	0.030U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-451	TIN	Lead	ug/l								0.098J	0.322	0.030UJ	0.030U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-451	TPH	TPH-Diesel	ug/l			100U					52U	49U	96U	49U	52U	130Y		
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-451	TPH	TPH-Gasoline	ug/l			50U					25U	100U	100U	100U	100U	100U		14J
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-451	VOA	Benzene	ug/l			0.2U					1.0U	0.50U	0.50U	0.50U	0.50U	0.50U		
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-451	VOA	Ethylbenzene	ug/l			0.5U					1.0U	0.50U	0.14J	0.50U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-451	VOA	Toluene	ug/l			0.5U					1.0U	0.50U	0.65U	0.50U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-451	VOA	Xylenes	ug/l			1U					3.0U	1.0U	0.78J	1.0U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-451	VOA	m,p-Xylene	ug/l			1U					2.0U	0.50U	0.56	0.50U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-451	VOA	o-Xylene	ug/l			1U					1.0U	0.50U	0.22J	0.50U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	HMX	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	RDX	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	1,3,5-Trinitrobenzene	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	1,3-Dinitrobenzene	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	Nitrobenzene	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	Tetryl	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	2,4,6-Trinitrotoluene	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	4-Amino-2,6-dinitrotoluene	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	2-Amino-4,6-dinitrotoluene	ug/l								4.4J							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	2,6-Dinitrotoluene	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	2,4-Dinitrotoluene	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	2-Nitrotoluene	ug/l								2.5U							

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NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	4-Nitrotoluene	ug/l								2.5U							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	ORD	3-Nitrotoluene	ug/l								6.9J							
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Acenaphthene	ug/l			3.31J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Acenaphthylene	ug/l			1U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Anthracene	ug/l			0.654J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Benzo(a)anthracene	ug/l			0.442J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Benzo(a)pyrene	ug/l			1U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Benzo(b)fluoranthene	ug/l			1U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Benzo(g,h,i)perylene	ug/l			1U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Benzo(k)fluoranthene	ug/l			1U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Chrysene	ug/l			1U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Dibenz(a,h)anthracene	ug/l			1U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Fluoranthene	ug/l			1.74J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Fluorene	ug/l			4.36J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			1U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Naphthalene	ug/l			361J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Phenanthrene	ug/l			4.58J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	SVOA	Pyrene	ug/l			1.1J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	TIN	Lead	ug/l								24.8J	21.6	16.6J	17.2				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	DIN	Lead	ug/l									21.3	14.7J	15.8				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	TPH	TPH-Diesel	ug/l			18800					9600J	9000Y	6600Y	9900Y	9300Y	11000Y	11000Y	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	TPH	TPH-Gasoline	ug/l			10400					6400	6100DY	5900Y	9200DY	5300Y	6900Y	4200Y	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	TPH	TPH-Heavy Fraction/Oil	ug/l			750U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,1,1-Trichloroethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,1,2,2-Tetrachloroethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,1,2-Trichloroethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,1-Dichloroethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,1-Dichloroethene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,1-Dichloropropene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,2,3-Trichlorobenzene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,2,3-Trichloropropane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,2,4-Trichlorobenzene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,2,4-Trimethylbenzene	ug/l			494J	752											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,2-Dibromo-3-chloropropane	ug/l			5U	12.5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,2-Dibromoethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,2-Dichlorobenzene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,2-Dichloroethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,2-Dichloropropane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,3,5-Trimethylbenzene	ug/l			218J	241											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,3-Dichlorobenzene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,3-Dichloropropane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	1,4-Dichlorobenzene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	2,2-Dichloropropane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	2-Butanone	ug/l			25.4U	250U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	2-Chloroethyl vinyl ether	ug/l				50U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	2-Chlorotoluene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	2-Hexanone	ug/l			10U	50U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	4-Chlorotoluene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	4-Isopropyltoluene	ug/l			39.8J	21.6											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	4-Methyl-2-pentanone	ug/l			10U	50U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Acetone	ug/l			25U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Benzene	ug/l			1U	2.5U				1.0U	0.50U	5.0 UJ	0.50U	0.50U	0.50UJ	0.10J	

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NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Bromobenzene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Bromochloromethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Bromodichloromethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Bromoform	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Bromomethane	ug/l			2U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Carbon disulfide	ug/l			1U	50U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Carbon tetrachloride	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Chlorobenzene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Chloroethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Chloroform	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Chloromethane	ug/l			5U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	cis-1,2-Dichloroethene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	cis-1,3-Dichloropropene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Dibromochloromethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Dibromomethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Dichlorodifluoromethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Ethylbenzene	ug/l			287	246				36	68D	23DJ	91DJ				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Hexachlorobutadiene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Isopropylbenzene	ug/l			58.5J	69.1											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	m,p-Xylene	ug/l			861J	883				360	430D	260DJ	620DJ				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Methylene chloride	ug/l			5U	25U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Naphthalene	ug/l			213J	238											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	n-Butylbenzene	ug/l			1U	6.25											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	n-Propylbenzene	ug/l			61.7J	78.9											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	o-Xylene	ug/l			392J	699				130	160D	88DJ	240DJ				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	sec-Butylbenzene	ug/l			11.7	10.4											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Styrene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	tert-Butylbenzene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Tetrachloroethene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Toluene	ug/l			50.7J	47.8				0.83J	3.3	5.0UJ	1.9J				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	trans-1,2-Dichloroethene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	trans-1,3-Dichloropropene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Trichloroethene	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Trichlorofluoromethane	ug/l			1U	5U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Vinyl chloride	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-452	VOA	Xylenes	ug/l			1800					490	590D	348DJ	860DJ				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	DIN	Lead	ug/l									9.160	8.230J	4.010				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	TIN	Lead	ug/l								21.4J	9.730	9.160J	4.940				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	TPH	Benzene	ug/l			20.5J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	TPH	Ethylbenzene	ug/l			62.9												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	TPH	Toluene	ug/l			16.5J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	TPH	TPH-Diesel	ug/l			27000					9400J	8400Y	7500Y	6000Y	7600YJ	7000Y	5600Y	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	TPH	TPH-Gasoline	ug/l			8700					4100	3800DY	3500Y	4700DY	3200Y	3900Y	2600Y	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	TPH	TPH-Heavy Fraction/Oil	ug/l			8250U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	TPH	Xylenes	ug/l			621												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,1,1,2-Tetrachloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,1,1-Trichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,1,2,2-Tetrachloroethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,1,2-Trichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,1-Dichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,1-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,1-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,2,3-Trichlorobenzene	ug/l				10U											

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NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,2,3-Trichloropropane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,2,4-Trichlorobenzene	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,2,4-Trimethylbenzene	ug/l				401											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,2-Dibromo-3-chloropropane	ug/l				25U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,2-Dibromoethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,2-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,2-Dichloroethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,2-Dichloropropane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,3,5-Trimethylbenzene	ug/l				139											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,3-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,3-Dichloropropane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	1,4-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	2,2-Dichloropropane	ug/l				10UJ											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	2-Butanone	ug/l				500U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	2-Chlorotoluene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	2-Hexanone	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	4-Chlorotoluene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	4-Isopropyltoluene	ug/l				15.2											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	4-Methyl-2-pentanone	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Benzene	ug/l			14.7J	10.5				1.2	1.7U	2.4J	4.2	3.6J	3.5D	6.6J	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Bromobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Bromochloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Bromodichloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Bromoform	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Bromomethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Carbon disulfide	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Carbon tetrachloride	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Chlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Chloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Chloroform	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Chloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	cis-1,2-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	cis-1,3-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Dibromochloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Dibromomethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Dichlorodifluoromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Ethylbenzene	ug/l			90.2	51				22	24	24J	35				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Hexachlorobutadiene	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Isopropylbenzene	ug/l				20.1											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	m,p-Xylene	ug/l				513				110	89	97J	120				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Methylene chloride	ug/l				50U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Naphthalene	ug/l				254											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	n-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	n-Propylbenzene	ug/l				22.8											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	o-Xylene	ug/l				21.2				24	22	27J	25				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	sec-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Styrene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	tert-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Tetrachloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Toluene	ug/l			20.7	10U				2.2	2.0	2.5J	4.2				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	trans-1,2-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	trans-1,3-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Trichloroethene	ug/l				10U											

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NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Trichlorofluoromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Vinyl chloride	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-453	VOA	Xylenes	ug/l			895					134	111	124J					
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	DIN	Lead	ug/l									0.341	0.578J					
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	TIN	Lead	ug/l								0.55J	0.460	0.749J					
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	TPH	Benzene	ug/l			1.77J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	TPH	Ethylbenzene	ug/l			12.2J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	TPH	Toluene	ug/l			1.25UJ												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	TPH	TPH-Diesel	ug/l			28300					1200	770Y	440Y		650YJ	510Y	290YJ	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	TPH	TPH-Gasoline	ug/l			943J					69	61J	68J		49J	46J	100U	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	TPH	TPH-Heavy Fraction/Oil	ug/l			8250U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	TPH	Xylenes	ug/l			14.8J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	VOA	Benzene	ug/l			3.76					1.0	0.68	0.56		0.95	0.39J	0.42J	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	VOA	Ethylbenzene	ug/l			28.9					0.81J	0.14J	0.21J					
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	VOA	Toluene	ug/l			0.92J					1.0U	0.50U	0.78U					
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	VOA	Xylenes	ug/l			24.3					3.0U	1.0U	0.13J					
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	VOA	m,p-Xylene	ug/l			24.3					2.0U	0.50U	0.13J					
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-455	VOA	o-Xylene	ug/l			24.3					1.0U	0.50U	0.50U					
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	DIN	Lead	ug/l									108J	94.0J	61.3				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	TIN	Lead	ug/l								180	112J	99.5J	64.7				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	TPH	Benzene	ug/l			13.9J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	TPH	Ethylbenzene	ug/l			226												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	TPH	Toluene	ug/l			121												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	TPH	TPH-Diesel	ug/l			5280					3900	5500Y	4300Z	4800Y	3700Z	8700Y	4900Y	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	TPH	TPH-Gasoline	ug/l			12700J					9900	14000DY	8600Y	10000DY	9500DY	14000DY	7800Y	7000Y
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	TPH	TPH-Heavy Fraction/Oil	ug/l			3750U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	TPH	Xylenes	ug/l			1630												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,1,1-Trichloroethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,1,2,2-Tetrachloroethane	ug/l			1U	20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,1,2-Trichloroethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,1-Dichloroethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,1-Dichloroethene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,1-Dichloropropene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,2,3-Trichlorobenzene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,2,3-Trichloropropane	ug/l			1U	20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,2,4-Trichlorobenzene	ug/l			1U	20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,2,4-Trimethylbenzene	ug/l			594	442											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,2-Dibromo-3-chloropropane	ug/l			5U	25U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,2-Dibromoethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,2-Dichlorobenzene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,2-Dichloroethane	ug/l			1U	20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,2-Dichloropropane	ug/l			1U	20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,3,5-Trimethylbenzene	ug/l			161	146											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,3-Dichlorobenzene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,3-Dichloropropane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	1,4-Dichlorobenzene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	2,2-Dichloropropane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	2-Butanone	ug/l			10U	500U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	2-Chloroethyl vinyl ether	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	2-Chlorotoluene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	2-Hexanone	ug/l			10U	100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	4-Chlorotoluene	ug/l			1U	10U											

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NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	4-Isopropyltoluene	ug/l			48.9	20.5											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	4-Methyl-2-pentanone	ug/l			10U	100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Acetone	ug/l			150												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Benzene	ug/l			11.3J	6.8				4.9	6.0DJ	5.1D	2.5D	1.9J	3.0DJ	1.4J	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Bromobenzene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Bromochloromethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Bromodichloromethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Bromoform	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Bromomethane	ug/l			2U	20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Carbon disulfide	ug/l			1U	100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Carbon tetrachloride	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Chlorobenzene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Chloroethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Chloroform	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Chloromethane	ug/l			5U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	cis-1,2-Dichloroethene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	cis-1,3-Dichloropropene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Dibromochloromethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Dibromomethane	ug/l			1U	20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Dichlorodifluoromethane	ug/l			1UJ	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Ethylbenzene	ug/l			247J	330				200	410DJ	220D	260D				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Hexachlorobutadiene	ug/l			1U	20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Isopropylbenzene	ug/l			93.3	53.1											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	m,p-Xylene	ug/l			1140	1580				370	700DJ	360D	460D				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Methylene chloride	ug/l			5U	50U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Naphthalene	ug/l			331	353											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	n-Butylbenzene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	n-Propylbenzene	ug/l			88.5	52.1											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	o-Xylene	ug/l			270	517				310	650DJ	360D	390D				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	sec-Butylbenzene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Styrene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	tert-Butylbenzene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Tetrachloroethene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Toluene	ug/l			228J	261				130	140DJ	78D	65D				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	trans-1,2-Dichloroethene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	trans-1,3-Dichloropropene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Trichloroethene	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Trichlorofluoromethane	ug/l			1U	10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Vinyl chloride	ug/l			1U	20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-461	VOA	Xylenes	ug/l			1920J					680	1350D	720D	850D				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,1,1,2-Tetrachloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,1,1-Trichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,1,2,2-Tetrachloroethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,1,2-Trichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,1-Dichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,1-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,1-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,2,3-Trichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,2,3-Trichloropropane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,2,4-Trichlorobenzene	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,2,4-Trimethylbenzene	ug/l				243											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,2-Dibromo-3-chloropropane	ug/l				25U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,2-Dibromoethane	ug/l				10U											

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NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,2-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,2-Dichloroethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,2-Dichloropropane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,3,5-Trimethylbenzene	ug/l				50.4											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,3-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,3-Dichloropropane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	1,4-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	2,2-Dichloropropane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	2-Butanone	ug/l				500U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	2-Chloroethyl vinyl ether	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	2-Chlorotoluene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	2-Hexanone	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	4-Chlorotoluene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	4-Isopropyltoluene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	4-Methyl-2-pentanone	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Benzene	ug/l				15.1											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Bromobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Bromochloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Bromodichloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Bromoform	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Bromomethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Carbon disulfide	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Carbon tetrachloride	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Chlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Chloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Chloroform	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Chloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	cis-1,2-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	cis-1,3-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Dibromochloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Dibromomethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Dichlorodifluoromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Ethylbenzene	ug/l				45.9											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Hexachlorobutadiene	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Isopropylbenzene	ug/l				10.9											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	m,p-Xylene	ug/l				306											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Methylene chloride	ug/l				50U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Naphthalene	ug/l				147											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	n-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	n-Propylbenzene	ug/l				11.8											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	o-Xylene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	sec-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Styrene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	tert-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Tetrachloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Toluene	ug/l				13.1											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	trans-1,2-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	trans-1,3-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Trichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Trichlorofluoromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-463	VOA	Vinyl chloride	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-478	DIN	Lead	ug/l									0.040	0.032U	0.045U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-478	TIN	Lead	ug/l								0.73J	0.961	1.290	1.080				

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NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-478	TPH	TPH-Diesel	ug/l			8100					5600J	3100Y	2800Y	3200Y	3500YJ	4700Y	4400YJ	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-478	TPH	TPH-Gasoline	ug/l			520J					480	120Z	72J	81J	77J	220H	100U	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-478	VOA	Benzene	ug/l			0.4U					1.2	0.33J	0.15J	0.34J	0.26J	0.77	0.21J	
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-478	VOA	Ethylbenzene	ug/l			20.9					40	15	3.1	7.1				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-478	VOA	Toluene	ug/l			11.6					1.0U	0.21J	1.4U	1.1U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-478	VOA	Xylenes	ug/l			80					87	11	2.3	6.96J				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-478	VOA	m,p-Xylene	ug/l								87	11	2.3	6.8				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-478	VOA	o-Xylene	ug/l								1.0U	0.50U	0.50U	0.16J				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-479	DIN	Lead	ug/l									0.407	0.089	0.236				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-479	TIN	Lead	ug/l								0.90J	2.130	0.666	0.737				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-479	TPH	TPH-Diesel	ug/l			100U					190	50U	550Y	1200Y	1400YJ	1100Y		
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-479	TPH	TPH-Gasoline	ug/l			50U					25U	100U	100U	100U	30J	100U		100U
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-479	VOA	Benzene	ug/l			0.2U					1.0U	0.50U	0.50U	0.070J	0.50U	0.50U		
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-479	VOA	Ethylbenzene	ug/l			0.5U					1.0U	0.50U	0.50U	0.10J				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-479	VOA	Toluene	ug/l			0.5U					1.0U	0.12	1.6U	0.50U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-479	VOA	Xylenes	ug/l			1U					3.0U	1.0U	0.14J	1.0U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-479	VOA	m,p-Xylene	ug/l								2.0U	0.50U	0.14J	0.50U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-479	VOA	o-Xylene	ug/l								1.0U	0.50U	0.50U	0.50U				
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	TPH	Benzene	ug/l			96.1J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	TPH	Ethylbenzene	ug/l			428J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	TPH	Toluene	ug/l			207J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	TPH	TPH-Diesel	ug/l			9390												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	TPH	TPH-Gasoline	ug/l			17200J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	TPH	TPH-Heavy Fraction/Oil	ug/l			750U												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	TPH	Xylenes	ug/l			1210J												
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,1,1,2-Tetrachloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,1,1-Trichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,1,2,2-Tetrachloroethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,1,2-Trichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,1-Dichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,1-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,1-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,2,3-Trichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,2,3-Trichloropropane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,2,4-Trichlorobenzene	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,2,4-Trimethylbenzene	ug/l				413											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,2-Dibromo-3-chloropropane	ug/l				25U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,2-Dibromoethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,2-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,2-Dichloroethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,2-Dichloropropane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,3,5-Trimethylbenzene	ug/l				155											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,3-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,3-Dichloropropane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	1,4-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	2,2-Dichloropropane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	2-Butanone	ug/l				500U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	2-Chloroethyl vinyl ether	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	2-Chlorotoluene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	2-Hexanone	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	4-Chlorotoluene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	4-Isopropyltoluene	ug/l				12.8											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	4-Methyl-2-pentanone	ug/l				100U											

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NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Benzene	ug/l				139											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Bromobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Bromochloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Bromodichloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Bromoform	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Bromomethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Carbon disulfide	ug/l				100U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Carbon tetrachloride	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Chlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Chloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Chloroform	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Chloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	cis-1,2-Dichloroethene	ug/l				34.1											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	cis-1,3-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Dibromochloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Dibromomethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Dichlorodifluoromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Ethylbenzene	ug/l				312											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Hexachlorobutadiene	ug/l				20U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Isopropylbenzene	ug/l				50.3											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	m,p-Xylene	ug/l				873											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Methylene chloride	ug/l				50U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Naphthalene	ug/l				319											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	n-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	n-Propylbenzene	ug/l				55.4											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	o-Xylene	ug/l				130											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	sec-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Styrene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	tert-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Tetrachloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Toluene	ug/l				242											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	trans-1,2-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	trans-1,3-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Trichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Trichlorofluoromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	SOUTH RUNWAY AREA	WLM	02-489	VOA	Vinyl chloride	ug/l				20U											
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-813	DIN	Lead	ug/l									1.100	0.769					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-813	TIN	Lead	ug/l								1.3J	1.200	0.872					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-813	TPH	TPH-Diesel	ug/l								310	220Y	150Y					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-813	TPH	TPH-Gasoline	ug/l			50U					850	390Z	830Z					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-813	VOA	Benzene	ug/l			0.2U					1.0U	0.50U	0.50U					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-813	VOA	Ethylbenzene	ug/l			0.5U					1.0U	0.50U	0.50U					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-813	VOA	Toluene	ug/l			0.5U					1.0U	0.50U	0.90U					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-813	VOA	Xylenes	ug/l			1U					3.0U	1.0U	1.0U					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-813	VOA	m,p-Xylene	ug/l			1U					2.0U	0.50U	0.50U					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-813	VOA	o-Xylene	ug/l			1U					1.0U	0.50U	0.50U					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-817	DIN	Lead	ug/l									36.6J	22.2J	18.4				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-817	TIN	Lead	ug/l								32.3J	42.4J	24.0J	21.9				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-817	TPH	TPH-Diesel	ug/l								12000J	16000Y	8900Y	6700Y	6500Z	6500Y	4500Y	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-817	TPH	TPH-Gasoline	ug/l								12000J	11000DY	10000DY	12000DY	11000DY	8600DY	5700Y	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-817	VOA	Benzene	ug/l								11	7.8D	13D	11D	11J	17DJ	5.5J	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-817	VOA	Ethylbenzene	ug/l								170	140D	200D	200D				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-817	VOA	Toluene	ug/l								28	19D	17D	25D				

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NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-817	VOA	Xylenes	ug/l								4500	1310D	1520D	1700D				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-817	VOA	m,p-Xylene	ug/l								1600	1100D	1400D	1500D				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-817	VOA	o-Xylene	ug/l								2900	210D	120D	200D				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-818	DIN	Lead	ug/l									127	81.7J	32.6				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-818	TIN	Lead	ug/l									141	96.2J	35.0				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-818	TPH	TPH-Diesel	ug/l									13000Y	9800Y	4400Y		15000Y		
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-818	TPH	TPH-Gasoline	ug/l									9600DY	9700Z	9100DY		9700DY		6900Y
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-818	VOA	Benzene	ug/l									11D	5.5JD	3.0D		2.6DJ		
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-818	VOA	Ethylbenzene	ug/l									58D	42D	40D				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-818	VOA	Toluene	ug/l									20D	15JD	9.9D				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-818	VOA	Xylenes	ug/l									1320D	1430D	1096D				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-818	VOA	m,p-Xylene	ug/l									1200D	1300D	1000D				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	02-818	VOA	o-Xylene	ug/l									120D	130D	96D				
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	DIN	Lead	ug/l									44.6J	35.2	43.9				
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	TIN	Lead	ug/l								56.7	49.5J	40.0	49.3				
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	TPH	TPH-Diesel	ug/l			3480					1700	1900Y	1700Y	2300Y	1700Z	1900L	1500L	
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	TPH	TPH-Gasoline	ug/l			16400					14000	13000DY	9400DY	11000DY	13000DY	17000DY	9900Y	7900Y
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,1,1,2-Tetrachloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,1,1-Trichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,1,2,2-Tetrachloroethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,1,2-Trichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,1-Dichloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,1-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,1-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,2,3-Trichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,2,3-Trichloropropane	ug/l				20U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,2,4-Trichlorobenzene	ug/l				20U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,2,4-Trimethylbenzene	ug/l				287											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,2-Dibromo-3-chloropropane	ug/l				25U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,2-Dibromoethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,2-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,2-Dichloroethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,2-Dichloropropane	ug/l				20U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,3,5-Trimethylbenzene	ug/l				84.6											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,3-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,3-Dichloropropane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	1,4-Dichlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	2,2-Dichloropropane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	2-Butanone	ug/l				500U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	2-Chloroethyl vinyl ether	ug/l				100U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	2-Chlorotoluene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	2-Hexanone	ug/l				100U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	4-Chlorotoluene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	4-Isopropyltoluene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	4-Methyl-2-pentanone	ug/l				100U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Benzene	ug/l				5U				1.0U	0.50U	1.0U	0.50U	0.50U	0.50UJ	0.50U	
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Bromobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Bromochloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Bromodichloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Bromoform	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Bromomethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Carbon disulfide	ug/l				100U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Carbon tetrachloride	ug/l				10U											

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NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Chlorobenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Chloroethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Chloroform	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Chloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	cis-1,2-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	cis-1,3-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Dibromochloromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Dibromomethane	ug/l				20U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Dichlorodifluoromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Ethylbenzene	ug/l			345	441				120	90DJ	160D	170DJ				
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Hexachlorobutadiene	ug/l				20U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Isopropylbenzene	ug/l				62.5											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	m,p-Xylene	ug/l				1860				540	410DJ	800D	860DJ				
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Methylene chloride	ug/l				50U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Naphthalene	ug/l				116											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	n-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	n-Propylbenzene	ug/l				45.9											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	o-Xylene	ug/l				330				31	48J	61DJ	56J				
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	sec-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Styrene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	tert-Butylbenzene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Tetrachloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Toluene	ug/l			25U	10U				1.0U	0.50U	1.6UJ	0.54UJ				
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	trans-1,2-Dichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	trans-1,3-Dichloropropene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Trichloroethene	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Trichlorofluoromethane	ug/l				10U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Vinyl chloride	ug/l				20U											
NMCB Building T-1416 Expanded Area	TANK FARM A AREA	WLM	E-201	VOA	Xylenes	ug/l			1660					571	458DJ	861DJ	916DJ				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-04	DIN	Lead	ug/l									74.2		58.0				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-04	TIN	Lead	ug/l									87.6		64.1				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-04	TPH	TPH-Diesel	ug/l									3400Y		1800Y		1600Y	1400Y	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-04	TPH	TPH-Gasoline	ug/l									5000DY		3200Y		4300Y	3300Y	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-04	VOA	Benzene	ug/l									0.86U		0.46J		0.50U	0.23J	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-04	VOA	Ethylbenzene	ug/l									36		24J				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-04	VOA	Toluene	ug/l									8.6		3.1J				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-04	VOA	Xylenes	ug/l									239D		169.9DJ				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-04	VOA	m,p-Xylene	ug/l									220D		160D				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-04	VOA	o-Xylene	ug/l									19		9.9J				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-05	DIN	Lead	ug/l									0.255J	0.300UJ	0.132				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-05	TIN	Lead	ug/l								0.82J	1.60J	0.911J	0.633				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-05	TPH	TPH-Diesel	ug/l								200	90U	120Z	110H				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-05	TPH	TPH-Gasoline	ug/l								150	100U	300Y	160Y				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-05	VOA	Benzene	ug/l								1.0U	0.50U	0.50U	0.060J				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-05	VOA	Ethylbenzene	ug/l								0.98J	0.50U	11	0.19J				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-05	VOA	Toluene	ug/l								1.0U	0.50U	0.81U	0.50U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-05	VOA	Xylenes	ug/l								1.4J	1.0U	26.9	0.79				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-05	VOA	m,p-Xylene	ug/l								1.4J	0.50U	25	0.79				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-05	VOA	o-Xylene	ug/l								1.0U	0.50U	1.9	0.50U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-07	DIN	Lead	ug/l									14.3						
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-07	TIN	Lead	ug/l									16.6						
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-07	TPH	TPH-Diesel	ug/l									7800Y						
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-07	TPH	TPH-Gasoline	ug/l									17000DY						

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-07	VOA	Benzene	ug/l									71D						
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-07	VOA	Ethylbenzene	ug/l									320D						
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-07	VOA	Toluene	ug/l									320D						
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-07	VOA	Xylenes	ug/l									2580D						
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-07	VOA	m,p-Xylene	ug/l									2000D						
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-07	VOA	o-Xylene	ug/l									580D						
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-08	DIN	Lead	ug/l									3.77J	0.723J	0.796				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-08	TIN	Lead	ug/l								3.5	4.97J	1.030J	1.060				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-08	TPH	TPH-Gasoline	ug/l								1900	1800Y	2600Y	2800DY	2600Y	3300Y	2200Y	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-08	TPH	TPH-Diesel	ug/l								6800	20000Y	6900Y	5600Y	5200Y	4900Y	4100Y	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-08	VOA	Toluene	ug/l								9.5	7.2	8.4D	15				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-08	VOA	Benzene	ug/l								37	29	33D	31	24J	26DJ	29J	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-08	VOA	o-Xylene	ug/l								19	18	16D	26				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-08	VOA	Ethylbenzene	ug/l								36	32	37D	42				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-08	VOA	m,p-Xylene	ug/l								140	85	97D	120				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-08	VOA	Xylenes	ug/l								159	103	113D	146				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-09	DIN	Lead	ug/l									0.682	0.619J	0.215				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-09	TIN	Lead	ug/l								0.56J	0.806	1.280J	0.394				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-09	TPH	TPH-Diesel	ug/l								2900	3500Y	8300Y	2600Y	2400Y	2400Y		
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-09	TPH	TPH-Gasoline	ug/l								470	330Y	580H	430Y	360Y	360H		210Y
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-09	VOA	Benzene	ug/l								2.0	2.9	3.8	3.7	2.3	2.1		
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-09	VOA	Ethylbenzene	ug/l								16	15	23	16				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-09	VOA	Toluene	ug/l								1.0U	0.85	2.3U	1.1U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-09	VOA	Xylenes	ug/l								32.2	33.4	61.9	33				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-09	VOA	m,p-Xylene	ug/l								31	32	60	32				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-09	VOA	o-Xylene	ug/l								1.2	1.4	1.9	1.0				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-10	DIN	Lead	ug/l									0.466J	1.260J					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-10	TIN	Lead	ug/l								1.7	1.00J	1.570J					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-10	TPH	TPH-Diesel	ug/l								4200	13000Y	6800Y			4000Y		
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-10	TPH	TPH-Gasoline	ug/l								4700	4600DY	3400Y			4300Y		
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-10	VOA	Benzene	ug/l								53	37J	6.8D			24DJ		
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-10	VOA	Ethylbenzene	ug/l								140	100DJ	45D					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-10	VOA	Toluene	ug/l								5.0	6.0J	4.3U					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-10	VOA	Xylenes	ug/l								402	342DJ	344D					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-10	VOA	m,p-Xylene	ug/l								390	330DJ	330D					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-10	VOA	o-Xylene	ug/l								12	12J	14D					
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-11	DIN	Lead	ug/l									0.403	0.148	0.228				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-11	TIN	Lead	ug/l								0.38J	0.932	0.871	0.036U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-11	TPH	TPH-Gasoline	ug/l								25U	27J	17J	18J	19J	19J	100U	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-11	TPH	TPH-Diesel	ug/l								1600	2500Y	2600Y	1200Y	2400YJ	3200Y	2600YJ	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-11	VOA	Toluene	ug/l								1.0U	0.50U	1.9U	0.50U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-11	VOA	Benzene	ug/l								1.0U	0.50U	0.50U	0.050J	0.50U	0.14J	0.11J	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-11	VOA	o-Xylene	ug/l								1.0U	0.50U	0.50U	0.50U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-11	VOA	Ethylbenzene	ug/l								1.0U	0.50U	0.50U	0.50U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-11	VOA	m,p-Xylene	ug/l								2.0U	0.50U	0.17J	0.50U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-11	VOA	Xylenes	ug/l								3.0U	1.0U	0.17J	1.0U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-12	DIN	Lead	ug/l									0.047	0.064U	0.030U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-12	TIN	Lead	ug/l								0.12J	0.105	0.075	0.053U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-12	TPH	TPH-Diesel	ug/l								5500J	3700Y	6500Y	3900Y	5600YJ	4000Y	3100YJ	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-12	TPH	TPH-Gasoline	ug/l								320	77J	220H	150H	130H	82J	100U	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-12	VOA	Benzene	ug/l								1.0U	0.50U	0.17J	0.12J	0.13J	0.060J	0.090J	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-12	VOA	Ethylbenzene	ug/l								4.3	1.6	3.4	9.5				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-12	VOA	Toluene	ug/l								1.0U	0.21J	1.8U	0.50U				

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NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-12	VOA	Xylenes	ug/l								13.1	3.58	9.0	9.0				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-12	VOA	m,p-Xylene	ug/l								11	2.7	6.5	8.3				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A	WLM	NMCB-12	VOA	o-Xylene	ug/l								2.1	0.88	2.5	0.70				
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-175	TPH	TPH-Gasoline	ug/l					39U	36.8UJ			32J						
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-175	VOA	Benzene	ug/l					1.1J	0.18J		1.0U		0.21J		0.15J		0.11J	
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-175	VOA	Ethylbenzene	ug/l					2U	0.5U		1.0U							
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-175	VOA	m,p-Xylene	ug/l					2U			1.2J							
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-175	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-175	VOA	o-Xylene	ug/l					2U			1.0U							
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-175	VOA	Toluene	ug/l					2U	0.5U		1.0U							
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-175	VOA	Xylenes	ug/l						0.31J		1.2J							
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	C10-C24 Aliphatics	ug/l	100U	78UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	C10-C24 Aromatics	ug/l	100U	78UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	C10-C25 Aliphatics	ug/l				120U											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	C10-C25 Aromatics	ug/l				83U											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	C25-C36 Aromatics	ug/l	100U	78UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	C6-C9 Aliphatics	ug/l	890J	500J													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	C6-C9 Aromatics	ug/l	590J	360J													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	GRO - Aliphatic Fraction	ug/l			377												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	GRO - Aromatic Fraction	ug/l			337												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	TPH-Diesel	ug/l	160U	160UJ		69J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	TPH-Gasoline	ug/l	1500J	860J	714		740	627	28.9J	620J	770Z						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	TPH	TPH-Heavy Fraction/Oil	ug/l				130J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,1,1-Trichloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,1,2-Trichloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,1-Dichloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,1-Dichloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,1-Dichloropropene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,2,3-Trichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,2,3-Trichloropropane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,2,4-Trichlorobenzene	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,2,4-Trimethylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,2-Dibromoethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,2-Dichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,2-Dichloroethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,2-Dichloropropane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,3,5-Trimethylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,3-Dichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,3-Dichloropropane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	1,4-Dichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	2,2-Dichloropropane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	2-Butanone	ug/l			50U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	2-Chloroethyl vinyl ether	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	2-Chlorotoluene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	2-Hexanone	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	4-Chlorotoluene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	4-Isopropyltoluene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	4-Methyl-2-pentanone	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Benzene	ug/l	590J	360J	361	250	390	288J	14.6	250	300D	320D	310D	310JD		280D	260JD

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ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Bromobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Bromochloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Bromodichloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Bromoform	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Bromomethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	BTEX (total)	ug/l	553.7	202.64													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Carbon disulfide	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Carbon tetrachloride	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Chlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Chloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Chloroform	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Chloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	cis-1,2-Dichloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	cis-1,3-Dichloropropene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Dibromochloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Dibromomethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Dichlorodifluoromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Ethylbenzene	ug/l	1.5	1.1	1.04	2J	0.69J	0.7J	0.5U	1.0U	0.53						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Hexachlorobutadiene	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Isopropylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	m,p-Xylene	ug/l	1.8	1.3	2U		0.77J			1.8J	1.9						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Methylene chloride	ug/l			5U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Naphthalene	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	n-Butylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	n-Propylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	o-Xylene	ug/l	0.4U	0.2U	1U		2U			1.0U	0.15J						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	sec-Butylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Styrene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	tert-Butylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Tetrachloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Toluene	ug/l	1.8	0.85	1U	5U	2U	0.34J	0.24J	1.0U	0.18J						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	trans-1,2-Dichloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	trans-1,3-Dichloropropene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Trichloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Trichlorofluoromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Vinyl chloride	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Xylenes	ug/l				15U		1J	1U	1.8J	2.05J						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-200	VOA	Xylenes (total)	ug/l	1.5	1.1						1.8J	2.05J						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	C10-C24 Aliphatics	ug/l	100U	79UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	C10-C24 Aromatics	ug/l	100U	98J													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	C10-C25 Aliphatics	ug/l				29J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	C10-C25 Aromatics	ug/l				83U											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	C25-C36 Aliphatics	ug/l	100U	58UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	C25-C36 Aromatics	ug/l	100U	77U													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	C6-C9 Aliphatics	ug/l	51	42J													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	C6-C9 Aromatics	ug/l	31J	24													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	GRO - Aliphatic Fraction	ug/l			90U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	GRO - Aromatic Fraction	ug/l			30U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	TPH-Diesel	ug/l	160U	160UJ		150J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	TPH-Gasoline	ug/l	83	66	90U		66U	58UJ	412	41	49J						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	TPH	TPH-Heavy Fraction/Oil	ug/l				180J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U												

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ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,1,1-Trichloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,1,2-Trichloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,1-Dichloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,1-Dichloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,1-Dichloropropene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,2,3-Trichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,2,3-Trichloropropane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,2,4-Trichlorobenzene	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,2,4-Trimethylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,2-Dibromoethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,2-Dichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,2-Dichloroethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,2-Dichloropropane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,3,5-Trimethylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,3-Dichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,3-Dichloropropane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	1,4-Dichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	2,2-Dichloropropane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	2-Butanone	ug/l			50U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	2-Chloroethyl vinyl ether	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	2-Chlorotoluene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	2-Hexanone	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	4-Chlorotoluene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	4-Isopropyltoluene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	4-Methyl-2-pentanone	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Aggregate TPH	ug/l	29.36														
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Benzene	ug/l	29	22	17.8	18	24	16	233J	13J	14	16	12	12		9.6	9.3
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Bromobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Bromochloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Bromodichloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Bromoform	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Bromomethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	BTEX (total)	ug/l	29.36														
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Carbon disulfide	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Carbon tetrachloride	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Chlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Chloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Chloroform	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Chloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	cis-1,2-Dichloroethene	ug/l			8												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	cis-1,3-Dichloropropene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Dibromochloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Dibromomethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Dichlorodifluoromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Ethylbenzene	ug/l	0.2U	0.2U	1U	1U	2U	0.5U	0.54J	0.62J	0.50U						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Hexachlorobutadiene	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Isopropylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U		2U			3.7J	050U						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Methylene chloride	ug/l			5U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Naphthalene	ug/l			2U												

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ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	n-Butylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	n-Propylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	o-Xylene	ug/l	0.2U	0.2U	1U		2U			0.73J	0.11J						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	sec-Butylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Styrene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	tert-Butylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Tetrachloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Toluene	ug/l	0.36	0.31	1U	0.59J	2U	0.27J	0.32J	1.0J	0.28J						
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	trans-1,2-Dichloroethene	ug/l			1.27												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	trans-1,3-Dichloropropene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Trichloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Trichlorofluoromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Vinyl chloride	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Xylenes	ug/l				3U		1U	1.08J	4.43J							
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-202	VOA	Xylenes (total)	ug/l	0.2							4.43J							
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	C10-C24 Aliphatics	ug/l	100U	79U													
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	C10-C24 Aromatics	ug/l	120	79UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	C25-C36 Aliphatics	ug/l	100U	58UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	C25-C36 Aromatics	ug/l	100U	78UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	C6-C9 Aliphatics	ug/l	240J	43													
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	C6-C9 Aromatics	ug/l	20U	20U													
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	GRO - Aliphatic Fraction	ug/l			90U												
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	GRO - Aromatic Fraction	ug/l			30U												
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	TPH-Diesel	ug/l	180	160UJ		160U											
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	TPH-Gasoline	ug/l	260	47	90U	17.4J											
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	TPH	TPH-Heavy Fraction/Oil	ug/l				120J											
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	VOA	Benzene	ug/l	0.4U	0.2U	0.536	1U											
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	VOA	BTEX (total)	ug/l	0.8U														
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	VOA	Ethylbenzene	ug/l	0.37	0.2U	2U	1U											
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	VOA	m,p-Xylene	ug/l	1.4	0.4U	2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	VOA	o-Xylene	ug/l	0.76	0.24	2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	VOA	Toluene	ug/l	0.6U	0.3U	2U	1U											
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	VOA	Xylenes	ug/l				3U											
ROICC Contractor's Area (UST ROICC-7)	ROICC PAD UST NO. 8	WLM	08-153	VOA	Xylenes (total)	ug/l	0.8U														
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	C10-C24 Aliphatics	ug/l	100U	82U													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	C10-C24 Aromatics	ug/l	100U	83J													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	C25-C36 Aliphatics	ug/l	100U	59UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	C25-C36 Aromatics	ug/l	100U	78UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	C6-C9 Aliphatics	ug/l	27J	20U													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	C6-C9 Aromatics	ug/l	20U	20U													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	GRO - Aliphatic Fraction	ug/l			90U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	GRO - Aromatic Fraction	ug/l			30U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	TPH-Diesel	ug/l	160U	160UJ		75J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	TPH-Gasoline	ug/l	30	20U	90U	12J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	TPH	TPH-Heavy Fraction/Oil	ug/l				150J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	VOA	Benzene	ug/l	0.45	0.57	1.01	0.59J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	VOA	BTEX (total)	ug/l	0.5														
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	VOA	Ethylbenzene	ug/l	0.4U	0.2U	2U	1U											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	VOA	m,p-Xylene	ug/l	0.57	0.64	2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	VOA	o-Xylene	ug/l	0.23	0.26	2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	VOA	Toluene	ug/l	0.6U	0.3U	2U	1U											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	VOA	Xylenes	ug/l				3U											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-160	VOA	Xylenes (total)	ug/l	0.8U														

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ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	TPH	C10-C24 Aliphatics	ug/l	100U	81U													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	TPH	C10-C24 Aromatics	ug/l	100U	81UJ													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	TPH	C25-C36 Aliphatics	ug/l	100U	61U													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	TPH	C25-C36 Aromatics	ug/l	100U	81U													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	TPH	C6-C9 Aliphatics	ug/l	100J	110													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	TPH	C6-C9 Aromatics	ug/l	20U	20U													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	TPH	TPH-Diesel	ug/l	160U	160UJ													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	TPH	TPH-Gasoline	ug/l	110	120													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	VOA	Benzene	ug/l	0.39U	0.29J													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	VOA	BTEX (total)	ug/l	1.04														
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	VOA	Ethylbenzene	ug/l	0.59J	0.77													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	VOA	m,p-Xylene	ug/l	0.4U	0.4U													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	VOA	o-Xylene	ug/l	0.2U	0.2U													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	VOA	Toluene	ug/l	0.3U	0.3U													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-171	VOA	Xylenes (total)	ug/l	0.4U														
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	C10-C24 Aliphatics	ug/l	100U	80UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	C10-C24 Aromatics	ug/l	100U	80UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	C10-C25 Aliphatics	ug/l				42J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	C10-C25 Aromatics	ug/l				84U											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	C25-C36 Aromatics	ug/l	100U	78U													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	C6-C9 Aliphatics	ug/l	20UJ	20U													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	C6-C9 Aromatics	ug/l	20U	20U													
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	GRO - Aliphatic Fraction	ug/l			90U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	GRO - Aromatic Fraction	ug/l			30U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	TPH-Diesel	ug/l	150U	160UJ		110J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	TPH-Gasoline	ug/l	20U	20U	90U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	TPH	TPH-Heavy Fraction/Oil	ug/l				180J											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,1,1-Trichloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,1,2-Trichloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,1-Dichloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,1-Dichloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,1-Dichloropropene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,2,3-Trichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,2,3-Trichloropropane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,2,4-Trichlorobenzene	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,2,4-Trimethylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,2-Dibromoethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,2-Dichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,2-Dichloroethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,2-Dichloropropane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,3,5-Trimethylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,3-Dichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,3-Dichloropropane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	1,4-Dichlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	2,2-Dichloropropane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	2-Butanone	ug/l			50U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	2-Chloroethyl vinyl ether	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	2-Chlorotoluene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	2-Hexanone	ug/l			10U												

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ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	4-Chlorotoluene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	4-Isopropyltoluene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	4-Methyl-2-pentanone	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Benzene	ug/l	0.4U	0.2U	0.5U	1.2											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Bromobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Bromochloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Bromodichloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Bromoform	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Bromomethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	BTEX (total)	ug/l	0.8U														
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Carbon disulfide	ug/l			10U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Carbon tetrachloride	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Chlorobenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Chloroethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Chloroform	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Chloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	cis-1,2-Dichloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	cis-1,3-Dichloropropene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Dibromochloromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Dibromomethane	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Dichlorodifluoromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Ethylbenzene	ug/l	0.4U	0.2UJ	1U	1U											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Hexachlorobutadiene	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Isopropylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	m,p-Xylene	ug/l	0.8U	0.4U	2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Methylene chloride	ug/l			7.52												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Naphthalene	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	n-Butylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	n-Propylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	o-Xylene	ug/l	0.4U	0.2U	1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	sec-Butylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Styrene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	tert-Butylbenzene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Tetrachloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Toluene	ug/l	0.6U	0.3U	1U	1U											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	trans-1,2-Dichloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	trans-1,3-Dichloropropene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Trichloroethene	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Trichlorofluoromethane	ug/l			1U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Vinyl chloride	ug/l			2U												
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Xylenes	ug/l				3U											
ROICC Contractor's Area (UST ROICC-7)	ROICC-7)	WLM	08-201	VOA	Xylenes (total)	ug/l	0.8U														
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	TPH	C10-C24 Aliphatics	ug/l	100U	78UJ													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	TPH	C10-C24 Aromatics	ug/l	100U	86J													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	TPH	C25-C36 Aliphatics	ug/l	100U	58UJ													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	TPH	C25-C36 Aromatics	ug/l	100U	77U													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	TPH	C6-C9 Aliphatics	ug/l	73J	79J													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	TPH	C6-C9 Aromatics	ug/l	20U	20U													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	TPH	TPH-Diesel	ug/l	150U	160UJ													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	TPH	TPH-Gasoline	ug/l	76	86J													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	VOA	Benzene	ug/l	0.58	0.61J													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	VOA	BTEX (total)	ug/l	1.31														
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	VOA	Ethylbenzene	ug/l	0.2U	0.2U													

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ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	VOA	m,p-Xylene	ug/l	0.73NJ	0.64J													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	VOA	o-Xylene	ug/l	0.2U	0.4J													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	VOA	Toluene	ug/l	0.3U	0.3U													
ROICC Contractor's Area (UST ROICC-7)	CONTRACTORS AREA	WLM	08-203	VOA	Xylenes (total)	ug/l	0.73														
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	TPH	C10-C24 Aliphatics	ug/l	100U	78U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	TPH	C10-C24 Aromatics	ug/l	100U	78UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	TPH	C25-C36 Aromatics	ug/l	100U	78U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	TPH	C6-C9 Aliphatics	ug/l	23	20U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	TPH	C6-C9 Aromatics	ug/l	20U	20U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	TPH	TPH-Diesel	ug/l	160U	160UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	TPH	TPH-Gasoline	ug/l	24	21													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	VOA	Benzene	ug/l	0.2U	0.2U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	VOA	BTEX (total)	ug/l	0.4U														
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	VOA	Ethylbenzene	ug/l	0.2U	0.2U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	VOA	m,p-Xylene	ug/l	0.4U	0.4U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	VOA	o-Xylene	ug/l	0.2U	0.2U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	VOA	Toluene	ug/l	0.3U	0.3U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-204	VOA	Xylenes (total)	ug/l	0.4U														
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	TPH	C10-C24 Aliphatics	ug/l	100U	78U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	TPH	C10-C24 Aromatics	ug/l	100U	110J													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	TPH	C25-C36 Aliphatics	ug/l	100U	59UJ													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	TPH	C25-C36 Aromatics	ug/l	100U	78U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	TPH	C6-C9 Aromatics	ug/l	20U	20U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	TPH	TPH-Diesel	ug/l	150U	160													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	TPH	TPH-Gasoline	ug/l	23	20U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	VOA	Aggregate TPH	ug/l		0.2													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	VOA	Benzene	ug/l	0.2U	0.2U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	VOA	BTEX (total)	ug/l	0.4U	0.2													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	VOA	Ethylbenzene	ug/l	0.2U	0.2U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	VOA	m,p-Xylene	ug/l	0.4U	0.4U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	VOA	o-Xylene	ug/l	0.2U	0.2U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	VOA	Toluene	ug/l	0.3U	0.3U													
ROICC Contractor's Area (UST ROICC-7)	ROICC WAREHOUSE UST NO. 3	WLM	08-801	VOA	Xylenes (total)	ug/l	0.4U	0.2													
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	C10-C24 Aliphatics	ug/l	100U	79U													
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	C10-C24 Aromatics	ug/l	100U	150J													
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	C25-C36 Aromatics	ug/l	100U	78U													
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	C6-C10 Aliphatics	ug/l				1500		1770J									
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	C6-C10 Aromatics	ug/l				420		755J									
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	C6-C9 Aliphatics	ug/l	3700	3600													
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	C6-C9 Aromatics	ug/l	920	880													
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	GRO - Aliphatic Fraction	ug/l			1830		630J										
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	GRO - Aromatic Fraction	ug/l			261		410										
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	TPH-Diesel	ug/l	190	170	532U	1200											
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	TPH-Gasoline	ug/l	4600	4400	2090		1000J	3910	1770	3400		3200Z	3500Z	2200Y		1800Y	1600Z
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	TPH-Heavy Fraction/Oil	ug/l			1060U	280U											
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	TPH	TPH-Gasoline	ug/l									2000Y						
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	VOA	Benzene	ug/l	4.2J	5.6J	12.5		1.2J	0.76		0.76J		0.75JD					
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	VOA	BTEX (total)	ug/l	388														
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	VOA	Ethylbenzene	ug/l	7.9	23	5.71		1.9J	15.8		8.3		14D					
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	VOA	m,p-Xylene	ug/l	350	250	120		69J			190		260D					

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	VOA	o-Xylene	ug/l	10U	4U	2U		2U			1.0U		1.8JD					
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	VOA	Toluene	ug/l	15U	6U	2U		2U	1.77		1.0U		2.5U					
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	VOA	Xylenes	ug/l						140		190		261.8JD					
Runway 5-23 Avgas Valve Pit	AREA(WITH SWMU 32/33)	WLM	14-100	VOA	Xylenes (total)	ug/l	350							190		261.8JD					
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	TPH	C6-C10 Aliphatics	ug/l						623J									
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	TPH	C6-C10 Aromatics	ug/l						250UJ									
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	TPH	GRO - Aliphatic Fraction	ug/l					860										
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	TPH	GRO - Aromatic Fraction	ug/l					56										
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	TPH	TPH-Gasoline	ug/l					920	1240	631		990Y	960Z		730Y		780Y	
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	VOA	Benzene	ug/l					2U	0.5U	0.5U	1.0U							
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	VOA	Ethylbenzene	ug/l					2U	0.5U	0.5U	1.0U							
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	VOA	m,p-Xylene	ug/l					9.4			4.5							
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	VOA	o-Xylene	ug/l					2U			1.0U							
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	VOA	Toluene	ug/l					2U	0.5U	0.5U	1.0U							
Runway 5-23 Avgas Valve Pit	TANK FARM B AREA	WLM	14-110	VOA	Xylenes	ug/l						0.66J	1.14	4.5							
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	TPH	DRO - Aliphatic Fraction	ug/l				77J											
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	TPH	DRO - Aromatic Fraction	ug/l				260											
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	TPH	GRO - Aliphatic Fraction	ug/l				1900											
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	TPH	GRO - Aromatic Fraction	ug/l				2600											
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	TPH	TPH-Diesel	ug/l				850			4580J		38000Y		4600Y	2000Z		2200YJ	
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	TPH	TPH-Gasoline	ug/l				4500			1880		3600DY		3700Y	4100Y		1200Y	
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	VOA	Benzene	ug/l				160			2.4J		0.76		1.2	6.4		1.4	
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	VOA	Ethylbenzene	ug/l				340			142J		140D		220D				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	VOA	Toluene	ug/l				200			39.1J		41		60				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	VOA	Xylenes	ug/l				850			298J		470D		530D				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	VOA	m,p-Xylene	ug/l									290D		350D				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-145	VOA	o-Xylene	ug/l									180D		180D				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	GW	12-152	TPH	TPH-Gasoline	ug/l							37J								
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	GW	12-152	VOA	Benzene	ug/l							0.5U	1.0U							
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	GW	12-152	VOA	Ethylbenzene	ug/l							0.5U	1.0U							
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	GW	12-152	VOA	Toluene	ug/l							0.5U	1.0U							
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	GW	12-152	VOA	Xylenes	ug/l							1U	3.0U							
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	C10-C24 Aliphatics	ug/l	100U	86UJ													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	C10-C24 Aromatics	ug/l	100U	86UJ													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	C25-C36 Aliphatics	ug/l	100U	57UJ													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	C25-C36 Aromatics	ug/l	100U	75U													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	GRO - Aromatic Fraction	ug/l			30U												
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	TPH-Diesel	ug/l	160U	170UJ		300	71J	250U	238U	76		52J					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	TPH-Gasoline	ug/l	20U	20U	90U	9.1J	11U	80U	80U	25U		100U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	TPH	TPH-Heavy Fraction/Oil	ug/l				240J											
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U	2U	0.5U	0.5U	1.0U		0.50U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	VOA	BTEX (total)	ug/l	0.4U														
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U	2U	0.5U	0.5U	1.0U		0.50U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U		2U			2.0U		0.50U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	VOA	o-Xylene	ug/l	0.2U	0.2U	2U		2U			1.0U		0.50U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U	2U	0.5U	0.5U	1.0U		0.50U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	VOA	Xylenes	ug/l				3U		1U	1U	3.0U		1.0U					

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-801	VOA	Xylenes (total)	ug/l	0.4U							3.0U		1.0U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	C10-C24 Aliphatics	ug/l	100U	79UJ													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	C10-C24 Aromatics	ug/l	100U	79UJ													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	C25-C36 Aliphatics	ug/l	100U	57UJ													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	C25-C36 Aromatics	ug/l	100U	76UJ													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	GRO - Aromatic Fraction	ug/l			30U												
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	TPH-Diesel	ug/l	160U	160UJ		160U	43J	250U	240U	57U		27J		26J		12J	
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	TPH-Gasoline	ug/l	20U	20U	90U	6.8J	8.3U	18.9UJ	80U	25U		100U		100U		100U	
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	TPH	TPH-Heavy Fraction/Oil	ug/l				190J											
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U	2U	0.5U	0.5U	1.0U		0.50U		0.50U		0.50U	
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	VOA	BTEX (total)	ug/l	0.4U														
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U	2U	0.5U	0.5U	1.0U		0.50U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U		2U			2.0U		0.50U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	VOA	o-Xylene	ug/l	0.2U	0.2U	2U		2U			1.0U		0.50U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U	2U	0.5U	0.5U	1.0U		0.50U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	VOA	Xylenes	ug/l				3U		1U	1U	3.0U		1.0U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	UST 10591 - NSGA	WLM	12-802	VOA	Xylenes (total)	ug/l	0.4U							3.0U		1.0U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-116 -116	TPH	TPH-Diesel	ug/l				77J			238U	84	97Z		100Y	28J		24J	
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-116 -116	TPH	TPH-Gasoline	ug/l				12J			24.8J	25U	100U		100U				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-116 -116	VOA	Benzene	ug/l				1U			0.5U	1.0U	0.50U		0.50U				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-116 -116	VOA	Ethylbenzene	ug/l				1U			0.5U	1.0U	0.50U		0.50U				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-116 -116	VOA	Toluene	ug/l				1U			0.5U	1.0U	0.50U		0.50U				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-116 -116	VOA	Xylenes	ug/l				3U			1U	3.0U	1.0U		1.0U				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-116 -116	VOA	m,p-Xylene	ug/l									0.50U		0.50U				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-116 -116	VOA	o-Xylene	ug/l									0.50U		0.50U				
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	TPH	DRO - Aliphatic Fraction	ug/l				29J											
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	TPH	DRO - Aromatic Fraction	ug/l				360											
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	TPH	GRO - Aliphatic Fraction	ug/l				1100											
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	TPH	GRO - Aromatic Fraction	ug/l				2400											
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	TPH	TPH-Diesel	ug/l				1200			1130J	1200	360Y	1100Z					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	TPH	TPH-Gasoline	ug/l				3500			1220	1400	230Y	2300Y					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	VOA	Benzene	ug/l				29			5.45	4.2	0.40J	3.3D					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	VOA	Ethylbenzene	ug/l				270			111	110	14	120D					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	VOA	Toluene	ug/l				16			4.56	1.9	0.28J	3.4U					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	VOA	Xylenes	ug/l				580			95.4	84.1	12.76	113.9D					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	VOA	m,p-Xylene	ug/l									12	110D					
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	(NSGA)	WLM	MW-117	VOA	o-Xylene	ug/l									0.76	3.9D					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	2-Methylnaphthalene	ug/l										0.087	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Acenaphthene	ug/l										0.040U	0.33				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Acenaphthylene	ug/l										0.040U	0.032U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Anthracene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Benzo(a)anthracene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Benzo(a)pyrene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Benzo(b)fluoranthene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Benzo(g,h,i)perylene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Benzo(k)fluoranthene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Chrysene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Dibenz(a,h)anthracene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Fluoranthene	ug/l										0.020U	0.020U				

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SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Fluorene	ug/l										0.040U	0.69				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Indeno(1,2,3-cd)pyrene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Naphthalene	ug/l										0.050U	0.67				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Phenanthrene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	SVOA	Pyrene	ug/l										0.020U	0.020U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	TPH	C10-C24 Aliphatics	ug/l	100U	80U													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	TPH	C10-C24 Aromatics	ug/l	260	210J													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	TPH	C25-C36 Aliphatics	ug/l	100U	57U													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	TPH	C25-C36 Aromatics	ug/l	100U	75U													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	TPH	C6-C9 Aliphatics	ug/l	31	33													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	TPH	C6-C9 Aromatics	ug/l	20U	21													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	TPH	TPH-Diesel	ug/l	360	270J	4230	3500	3900	5760	4060J	5500	4800Y	5000Y	2400Y	4000Y	4200Y	3200Y	3500Y
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	TPH	TPH-Gasoline	ug/l	42	45	90U	42J	67										
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	TPH	TPH-Heavy Fraction/Oil	ug/l			1180U	1400		489J									
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	VOA	Benzene	ug/l	0.2U	0.55J	0.5U	0.32J	2U					0.50U	0.19J				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	VOA	BTEX (total)	ug/l	1.23														
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	VOA	Ethylbenzene	ug/l	0.57	0.57J	2U	0.86J	0.48J					0.30J	0.19J				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	VOA	m,p-Xylene	ug/l	0.47	0.68	2U		2U					0.50U	0.50U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	VOA	o-Xylene	ug/l	0.88	2.1	2U		2U					0.50U	0.10J				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U	2U					0.74U	0.50U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	VOA	Xylenes	ug/l				1.6J						1.0U	0.10J				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	02-230	VOA	Xylenes (total)	ug/l	0.88									1.0U	0.10J				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	E-403	TPH	TPH-Diesel	ug/l										67J	85				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	2-Methylnaphthalene	ug/l										0.041	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Acenaphthene	ug/l										0.050	0.15				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Acenaphthylene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Anthracene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Benzo(a)anthracene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Benzo(a)pyrene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Benzo(b)fluoranthene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Benzo(g,h,i)perylene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Benzo(k)fluoranthene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Chrysene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Dibenz(a,h)anthracene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Fluoranthene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Fluorene	ug/l										0.020U	0.049				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Indeno(1,2,3-cd)pyrene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Naphthalene	ug/l										0.030U	0.11U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Phenanthrene	ug/l										0.020U	0.019U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	SVOA	Pyrene	ug/l	790	230J								0.020U	0.025				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	TPH	C10-C24 Aromatics	ug/l	380	320J													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	TPH	C25-C36 Aliphatics	ug/l	100U	58UJ													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	TPH	C25-C36 Aromatics	ug/l	100U	78UJ													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	TPH	C6-C9 Aliphatics	ug/l	31	55													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	TPH	TPH-Diesel	ug/l	1200	350J	2790	2700	3600	3890	3700J	4300	4700Y	3400Y	3000Y	2700Y	3700Y	3900Y	3600Y
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	TPH	TPH-Gasoline	ug/l	37	60	90U	31J	38U										
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	TPH	TPH-Heavy Fraction/Oil	ug/l			1140U	880		500U									
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	VOA	Benzene	ug/l	0.2U	0.21J	0.5U	1U	2U					0.50U	0.060J				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	VOA	BTEX (total)	ug/l	0.4U														
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	VOA	Ethylbenzene	ug/l	0.22J	0.2U	2U	0.38J	1.7J					0.090J	0.080J				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U		0.37J					0.50U	0.50U				

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SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	VOA	o-Xylene	ug/l	0.2U	0.2UJ	2U		2U					0.50U	0.50U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U	2U					0.53U	0.50U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	VOA	Xylenes	ug/l				3U						1.0U	1.0U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	MRP-MW8	VOA	Xylenes (total)	ug/l	0.4U									1.0U	1.0U				
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	2-Methylnaphthalene	ug/l										0.0037J					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Acenaphthene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Acenaphthylene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Anthracene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Benzo(a)anthracene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Benzo(a)pyrene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Benzo(b)fluoranthene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Benzo(g,h,i)perylene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Benzo(k)fluoranthene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Chrysene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Dibenz(a,h)anthracene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Fluoranthene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Fluorene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Indeno(1,2,3-cd)pyrene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Naphthalene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Phenanthrene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	SVOA	Pyrene	ug/l										0.020U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	TPH	TPH-Diesel	ug/l									1000Y	60J					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	VOA	Benzene	ug/l										0.50U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	VOA	Ethylbenzene	ug/l										0.50U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	VOA	Toluene	ug/l										0.56U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	VOA	m,p-Xylene	ug/l										0.50U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	VOA	o-Xylene	ug/l										0.50U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	VOA	Xylenes	ug/l										1.0U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	NL-01	VOA	Xylenes (total)	ug/l										1.0U					
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	601	TPH	TPH-Diesel	ug/l													2100Y	1800Y	1900Y
SA 79, Main Road Pipeline, South End	MAIN DAVIS ROAD PIPELINE	WLM	602	TPH	TPH-Diesel	ug/l													70U		
SA 80, Steam Plant 4 (UST 27089 and 27090)	EAST RUNWAY AREA	WLM	04-103	TPH	TPH-Diesel	ug/l					96J	476	250U	110		91 J					
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-158	TPH	DRO - Aliphatic Fraction	ug/l				710											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-158	TPH	DRO - Aromatic Fraction	ug/l				840											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-158	TPH	GRO - Aliphatic Fraction	ug/l				36U											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-158	TPH	GRO - Aromatic Fraction	ug/l				460											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-158	TPH	TPH-Diesel	ug/l				9800			7310J					13000Y		8700Y	7500Y
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-158	TPH	TPH-Gasoline	ug/l				360											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-158	VOA	Benzene	ug/l				0.42J											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-158	VOA	Ethylbenzene	ug/l				11											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-158	VOA	Toluene	ug/l				1U											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-158	VOA	Xylenes	ug/l				30											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-159	TPH	DRO - Aliphatic Fraction	ug/l				53J											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-159	TPH	DRO - Aromatic Fraction	ug/l				400											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-159	TPH	GRO - Aliphatic Fraction	ug/l				69											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-159	TPH	GRO - Aromatic Fraction	ug/l				690											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-159	TPH	TPH-Diesel	ug/l				3300			1410J	3900	4300Y	9800Y	3800Y	4000Y	5000Y	3200Y	3400Y
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-159	TPH	TPH-Gasoline	ug/l				750											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-159	VOA	Benzene	ug/l				1.1											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-159	VOA	Ethylbenzene	ug/l				30											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-159	VOA	Toluene	ug/l				1.1											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-159	VOA	Xylenes	ug/l				150											

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SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-164	TPH	TPH-Diesel	ug/l				6100											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-164	TPH	TPH-Gasoline	ug/l				1000											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-164	VOA	Benzene	ug/l				2											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-164	VOA	Ethylbenzene	ug/l				49											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-164	VOA	Toluene	ug/l				1.2											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-164	VOA	Xylenes	ug/l				170											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-173	TPH	TPH-Diesel	ug/l						2560						3200Y		3900Y	3100Y
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-173	TPH	TPH-Gasoline	ug/l						114									
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-173	VOA	Benzene	ug/l						0.5U									
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-173	VOA	Ethylbenzene	ug/l						3.25									
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-173	VOA	Toluene	ug/l						0.5U									
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	RW	04-173	VOA	Xylenes	ug/l						2.92									
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	C10-C24 Aliphatics	ug/l	100U	80U													
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	C10-C24 Aromatics	ug/l	100U	80UJ													
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	C25-C36 Aromatics	ug/l	100U	78U													
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	GRO - Aromatic Fraction	ug/l			30U												
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	TPH-Diesel	ug/l	160U	160UJ	575U	160U			250U	53U	520Y	21J	58U	15J	30J	16J	
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	TPH-Gasoline	ug/l	20U	20U	90U	13J											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	TPH	TPH-Heavy Fraction/Oil	ug/l			1150U	110J											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	VOA	BTEX (total)	ug/l	0.4U														
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U												
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	VOA	o-Xylene	ug/l	0.2U	0.2U	2U												
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	VOA	Xylenes	ug/l				3U											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	04-801	VOA	Xylenes (total)	ug/l	0.4U														
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-2	TPH	DRO - Aliphatic Fraction	ug/l				1200											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-2	TPH	DRO - Aromatic Fraction	ug/l				1100											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-2	TPH	GRO - Aliphatic Fraction	ug/l				36U											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-2	TPH	GRO - Aromatic Fraction	ug/l				710											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-2	TPH	TPH-Diesel	ug/l				9600											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-2	TPH	TPH-Gasoline	ug/l				630											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-2	VOA	Benzene	ug/l				0.38J											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-2	VOA	Ethylbenzene	ug/l				32											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-2	VOA	Toluene	ug/l				1U											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-2	VOA	Xylenes	ug/l				73											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-3	TPH	DRO - Aliphatic Fraction	ug/l				49J											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-3	TPH	DRO - Aromatic Fraction	ug/l				730											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-3	TPH	GRO - Aliphatic Fraction	ug/l				36U											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-3	TPH	GRO - Aromatic Fraction	ug/l				740											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-3	TPH	TPH-Diesel	ug/l				4100	3400	5130	1670	4900	800Y	500Y		5700Y		3500Y	3800Y
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-3	TPH	TPH-Gasoline	ug/l				730											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-3	VOA	Benzene	ug/l				2.3											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-3	VOA	Ethylbenzene	ug/l				39											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-3	VOA	Toluene	ug/l				1U											
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA NO. 80, STEAM PLANT NO. 4	WLM	SP4-3	VOA	Xylenes	ug/l				150											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Acenaphthene	ug/l			2.47					1.5J	0.19D	0.55D	1.6D	0.94	0.97	0.59	1.4
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Acenaphthylene	ug/l			1U					0.40J	0.096U	0.21U	0.49U	0.29U	0.30U	0.19U	0.44U

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Anthracene	ug/l			1U					0.10U	0.17JD	0.21U	0.020U	0.020U	0.020U	0.068	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Benzo(a)anthracene	ug/l			1U					0.10U	0.020U	0.021U	0.020U	0.020U	0.020U	0.020UX	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Benzo(a)pyrene	ug/l			1UJ					0.10U	0.020U	0.021U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Benzo(b)fluoranthene	ug/l			1UJ					0.10U	0.020U	0.021U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Benzo(g,h,i)perylene	ug/l			1UJ					0.10U	0.0052J	0.021U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Benzo(k)fluoranthene	ug/l			1UJ					0.10U	0.020U	0.021U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Chrysene	ug/l			1U					0.10U	0.020U	0.021U	0.020U	0.020U	0.020U	0.0075JX	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Dibenz(a,h)anthracene	ug/l			1UJ					0.10U	0.0050J	0.021U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Fluoranthene	ug/l			1U					0.10U	0.096U	0.21U	0.020U	0.020U	0.020U	0.016J	0.018JX
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Fluorene	ug/l			8.55					3.3J	0.096U	0.43D	4.2D	2.4	2.6	1.7	3.6
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			1U					0.10U	0.0060J	0.021U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Naphthalene	ug/l			132					100J	0.31D	4.5	130D	160D	120D	120D	130D
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Phenanthrene	ug/l			5.51					1.4J	0.096U	0.21U	1.3	1.7	0.99	1.3	1.2
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	Pyrene	ug/l			1U					0.10U	0.59	0.021U	0.020U	0.011J	0.020U	0.010J	0.019JX
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	SVOA	2-Methylnaphthalene	ug/l								47J	0.067JD	0.15 U	64D	89D	62D	67D	76D
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	C10-C24 Aliphatics	ug/l	100U	81UJ													
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	C10-C24 Aromatics	ug/l	1340	1200J													
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	C10-C25 Aliphatics	ug/l				70J											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	C10-C25 Aromatics	ug/l				560											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	C25-C36 Aliphatics	ug/l	100U														
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	C25-C36 Aromatics	ug/l	100U														
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	C6-C9 Aliphatics	ug/l	1500	2000													
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	C6-C9 Aromatics	ug/l	940	790													
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	TPH-Diesel	ug/l	1200	1200J	23800	14000	8600	9970	17800	20000J	18000J	18000YJ	6700Y	7100YJ	5100Y	5400YJ	6000Y
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	TPH-Gasoline	ug/l	2400	2800	1690J	910	2100	2200	1450J	1800	1700Y	1700YJ	2200Y				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	TPH	TPH-Heavy Fraction/Oil	ug/l				880											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	VOA	Benzene	ug/l	35NJ	39	33.4	33	110	67.4	42J	36	17	24	35	31	25	25J	21
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	VOA	BTEX (total)	ug/l	360												345.9D	367.8JD	260D
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	VOA	Ethylbenzene	ug/l	63	52	47.3	34	64	49.2	55.1J	52	52	52	68	65	61	70D	60
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	VOA	m,p-Xylene	ug/l	250	220			170			220	210D	200D	280D	260D	250D	260D	170D
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	VOA	o-Xylene	ug/l	12	2UJ			5.9			10	9.4	8.4	9.5	8.4	7.5	8.9J	6.7
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	VOA	Toluene	ug/l	6U	4.3	4.37	3.2	4.2	1.99	2.65J	2.9	2.1	2.4	2.6	2.9	2.4	3.9J	2.3
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	VOA	Xylenes	ug/l			157	150		103	221J	230	219.4D	208.4D	289.5D	268.4D	257.5D	268.9DJ	176.7D
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	VOA	Xylenes (total)	ug/l	262							230	219.4D	208.4D	289.5D	268.4D	257.5D	268.9DJ	176.7D
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	2-Methylnaphthalene	ug/l								0.10U	0.020U	0.064	0.029	0.025U		0.020U	0.012JX
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Acenaphthene	ug/l								0.30J	0.042	0.19	0.40	0.43		0.60	0.68
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Acenaphthylene	ug/l								0.10U	0.020U	0.038U	0.052	0.072U		0.11U	0.13U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Anthracene	ug/l								0.10U	0.0089J	0.020U	0.020U	0.020U		0.065	0.051X
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Benzo(a)anthracene	ug/l								0.10U	0.020U	0.020U	0.020U	0.020U		0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Benzo(a)pyrene	ug/l								0.10U	0.020U	0.020U	0.020U	0.020U		0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Benzo(b)fluoranthene	ug/l								0.10U	0.020U	0.020U	0.020U	0.020U		0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Benzo(g,h,i)perylene	ug/l								0.10U	0.020U	0.020U	0.020U	0.020U		0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Benzo(k)fluoranthene	ug/l								0.10U	0.020U	0.020U	0.020U	0.020U		0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Chrysene	ug/l								0.10U	0.020U	0.020U	0.020U	0.020U		0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Dibenz(a,h)anthracene	ug/l								0.10U	0.020U	0.020U	0.020U	0.020U		0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Fluoranthene	ug/l								0.10U	0.020U	0.020U	0.020U	0.020U		0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Fluorene	ug/l								0.27J	0.064	0.51	0.50	0.71		0.75	1.2
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Indeno(1,2,3-cd)pyrene	ug/l								0.10U	0.020U	0.020U	0.020U	0.020U		0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Naphthalene	ug/l								0.42J	0.049U	0.66	0.93	0.61		2.9	0.44X
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Phenanthrene	ug/l								0.14J	0.020U	0.090	0.27	0.14		0.71	0.88
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	SVOA	Pyrene	ug/l								0.10U	0.014J	0.020U	0.0059J	0.020U		0.0085J	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	C10-C24 Aliphatics	ug/l	100U	80UJ													

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South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	C10-C24 Aromatics	ug/l	147	80UJ													
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	C10-C25 Aliphatics	ug/l				230											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	C10-C25 Aromatics	ug/l				150											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	C25-C36 Aromatics	ug/l	100U	78U													
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	C6-C9 Aliphatics	ug/l	20UJ	32J													
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	C6-C9 Aromatics	ug/l	20U	20U													
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	TPH-Diesel	ug/l	150	160UJ	1780	2800	1100	1870	2320J	2000	1300Y	1400Y	1500Y	2400YJ	3300Y		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	TPH-Gasoline	ug/l	28	38J	50U					25U	100U	29J	30J				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	TPH-Heavy Fraction/Oil	ug/l				430											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	VOA	Benzene	ug/l	0.4U	0.2U	0.2U					1.0U	0.50U	0.50U		0.16J		0.19J	0.14J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	VOA	BTEX (total)	ug/l	0.6													3.94J	0.23J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	VOA	Ethylbenzene	ug/l	0.51	0.46J	0.5U					1.0U	0.22J	0.21J		0.29J		3.3	0.090J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	VOA	m,p-Xylene	ug/l	0.95	0.44						2.0U	0.50U	0.12J		0.50U		0.45J	0.50U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	VOA	o-Xylene	ug/l	0.4U	0.2UJ						1.0U	0.50U	0.50U		0.50U		0.50U	0.50U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	VOA	Toluene	ug/l	0.6U	0.3U	0.5U					1.0U	0.16J	0.50U		0.50U		0.50U	0.50U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	VOA	Xylenes	ug/l			1U					3.0U	1.0U	0.12J		1.0U		0.45J	1.0U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	VOA	Xylenes (total)	ug/l	0.8U							3.0U	1.0U	0.12J		1.0U		0.45J	1.0U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-01	TPH	TPH-Diesel	ug/l			2310J												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-01	TPH	TPH-Gasoline	ug/l			50U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-01	VOA	Benzene	ug/l			0.2U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-01	VOA	Ethylbenzene	ug/l			0.5U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-01	VOA	Toluene	ug/l			0.5U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-01	VOA	Xylenes	ug/l			1U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-02	TPH	TPH-Diesel	ug/l			5200												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-02	TPH	TPH-Gasoline	ug/l			474J												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-02	VOA	Benzene	ug/l			1.69												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-02	VOA	Ethylbenzene	ug/l			52.3												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-02	VOA	Toluene	ug/l			0.5U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-02	VOA	Xylenes	ug/l			56.3												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	2-Methylnaphthalene	ug/l									0.0041J						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Acenaphthene	ug/l									0.0047J						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Acenaphthylene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Anthracene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Benzo(a)anthracene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Benzo(a)pyrene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Benzo(b)fluoranthene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Benzo(g,h,i)perylene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Benzo(k)fluoranthene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Chrysene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Dibenz(a,h)anthracene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Fluoranthene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Fluorene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Indeno(1,2,3-cd)pyrene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Naphthalene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Phenanthrene	ug/l									0.020U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	SVOA	Pyrene	ug/l									0.0090J						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	TPH	TPH-Diesel	ug/l			100UJ						150Z						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	TPH	TPH-Gasoline	ug/l			50U						100U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	VOA	Benzene	ug/l			0.2U						0.50U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	VOA	Ethylbenzene	ug/l			0.5U						0.50U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	VOA	Toluene	ug/l			0.5U						0.50U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	VOA	Xylenes	ug/l			1U						1.0U						

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South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	VOA	m,p-Xylene	ug/l									0.50U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-03	VOA	o-Xylene	ug/l									0.50U						
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-05	TPH	TPH-Diesel	ug/l			605J					51U	65Z		50U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-05	TPH	TPH-Gasoline	ug/l			50U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-05	VOA	Benzene	ug/l			0.2U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-05	VOA	Ethylbenzene	ug/l			0.5U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-05	VOA	Toluene	ug/l			0.5U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	18/36-05	VOA	Xylenes	ug/l			1U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	2-Methylnaphthalene	ug/l									57D	76D	130D	2.7	0.047	16JD	2.7
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Acenaphthene	ug/l									1.0	1.2	1.3	1	0.3	0.068X	0.14X
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Acenaphthylene	ug/l									0.44U	0.43U	0.48U	0.41U	0.14U	0.042U	0.025U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Anthracene	ug/l									0.065	0.045	0.044	0.05	0.051	0.053	0.044X
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Benzo(a)anthracene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Benzo(a)pyrene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Benzo(b)fluoranthene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Benzo(g,h,i)perylene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.0046J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Benzo(k)fluoranthene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Chrysene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.0045J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Dibenz(a,h)anthracene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.0030J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Fluoranthene	ug/l									0.020U	0.020U	0.0056J	0.020U	0.020U	0.020U	0.0090J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Fluorene	ug/l									3.6	2.9	3.8	3.3	2.3	1.2	0.67
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Indeno(1,2,3-cd)pyrene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.0028J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Naphthalene	ug/l									130D	120D	200D	11D	0.19	55JD	18DJ
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Phenanthrene	ug/l									2.3	1.3	1.7	1.7	1.3	1.3	1.2
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Pyrene	ug/l									0.012J	0.028	0.0067J	0.0054J	0.0054J	0.0048J	0.0072J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	TPH	TPH-Diesel	ug/l									2800Y	3500Y	2700Y	1500YJ	950Y		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	TPH	TPH-Gasoline	ug/l									300Y	270Y	350Y				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	VOA	Benzene	ug/l									12	10	10	4	2.6	13	17
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	VOA	Ethylbenzene	ug/l									35	19	34	15	0.26J	9.1	1.7
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	VOA	Toluene	ug/l									0.42J	0.55U	0.50U	0.50U	0.14J	1.0U	0.090J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	VOA	Xylenes	ug/l									38.73	21.39J	35.55	12.09J	0.11J	9.02J	3.7
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	VOA	m,p-Xylene	ug/l									38	21	35	12	0.11J	8.9	3.7
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	VOA	o-Xylene	ug/l									0.73	0.39J	0.55	0.090J	0.50U	0.12J	0.50U
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Acenaphthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Acenaphthylene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Anthracene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Benzo(a)anthracene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Benzo(a)pyrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Benzo(b)fluoranthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Benzo(g,h,i)perylene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Benzo(k)fluoranthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Chrysene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Dibenz(a,h)anthracene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Fluoranthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Fluorene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Naphthalene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Phenanthrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	SVOA	Pyrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	VOA	1,2-Dichlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	VOA	1,3-Dichlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	VOA	1,4-Dichlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	VOA	Benzene	ug/l			1U												

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SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	VOA	Chlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	VOA	Ethylbenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	VOA	m,p-Xylene	ug/l			2U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	VOA	o-Xylene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	VOA	Toluene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Acenaphthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Acenaphthylene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Anthracene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Benzo(a)anthracene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Benzo(a)pyrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Benzo(b)fluoranthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Benzo(g,h,i)perylene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Benzo(k)fluoranthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Chrysene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Dibenz(a,h)anthracene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Fluoranthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Fluorene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Naphthalene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Phenanthrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	SVOA	Pyrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	VOA	1,2-Dichlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	VOA	1,3-Dichlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	VOA	1,4-Dichlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	VOA	Benzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	VOA	Chlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	VOA	Ethylbenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	VOA	m,p-Xylene	ug/l			2U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	VOA	o-Xylene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-003	VOA	Toluene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Acenaphthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Acenaphthylene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Anthracene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Benzo(a)anthracene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Benzo(a)pyrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Benzo(b)fluoranthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Benzo(g,h,i)perylene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Benzo(k)fluoranthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Chrysene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Dibenz(a,h)anthracene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Fluoranthene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Fluorene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Naphthalene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Phenanthrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	SVOA	Pyrene	ug/l			0.1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	VOA	1,2-Dichlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	VOA	1,3-Dichlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	VOA	1,4-Dichlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	VOA	Benzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	VOA	Chlorobenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	VOA	Ethylbenzene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	VOA	m,p-Xylene	ug/l			2U												

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SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	VOA	o-Xylene	ug/l			1U												
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-004	VOA	Toluene	ug/l			1U												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-206	TPH	TPH-Diesel	ug/l			825					680	460J	390J	95Y				
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-206	TPH	TPH-Gasoline	ug/l			50U												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-206	VOA	Benzene	ug/l			0.2U												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-206	VOA	Ethylbenzene	ug/l			0.5U												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-206	VOA	Toluene	ug/l			0.5U												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-206	VOA	Xylenes	ug/l			1U												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	2-Methylnaphthalene	ug/l								0.10U	0.020U		0.020U		0.0024J		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Acenaphthene	ug/l								0.10U	0.020U		0.020U		0.018J		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Acenaphthylene	ug/l								0.10U	0.020U		0.020U		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Anthracene	ug/l								0.10U	0.020U		0.0085J		0.0044J		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Benzo(a)anthracene	ug/l								0.10U	0.020U		0.020U		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Benzo(a)pyrene	ug/l								0.10U	0.020U		0.020U		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Benzo(b)fluoranthene	ug/l								0.10U	0.020U		0.020U		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Benzo(g,h,i)perylene	ug/l								0.10U	0.020U		0.020U		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Benzo(k)fluoranthene	ug/l								0.10U	0.020U		0.020U		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Chrysene	ug/l								0.10U	0.020U		0.020U		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Dibenz(a,h)anthracene	ug/l								0.10U	0.020U		0.020U		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Fluoranthene	ug/l								0.10U	0.020U		0.060		0.0083J		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Fluorene	ug/l								0.10U	0.020U		0.020U		0.013J		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Indeno(1,2,3-cd)pyrene	ug/l								0.10U	0.020U		0.020U		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Naphthalene	ug/l								0.10U	0.020U		0.036		0.024U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Phenanthrene	ug/l								0.10U	0.020U		0.020U		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	SVOA	Pyrene	ug/l								0.10U	0.0030J		0.038		0.020U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	TPH	C10-C24 Aliphatics	ug/l		120J													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	TPH	C10-C24 Aromatics	ug/l		140J													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	TPH	C25-C36 Aliphatics	ug/l		58UJ													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	TPH	C25-C36 Aromatics	ug/l		78UJ													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	TPH	C6-C9 Aliphatics	ug/l		20UJ													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	TPH	C6-C9 Aromatics	ug/l		20U													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	TPH	TPH-Diesel	ug/l		270J	129J	170U	100U	250U	250U	53U	32J		49U		26J		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	TPH	TPH-Gasoline	ug/l		20UJ	50U					25U	100U		100U				
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	TPH	TPH-Heavy Fraction/Oil	ug/l				280U											
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	VOA	Benzene	ug/l		0.2U	0.2U					1.0U	0.50U		0.50U		0.50U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	VOA	Ethylbenzene	ug/l		0.2U	0.5U					1.0U	0.50U		0.50U		0.50U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	VOA	m,p-Xylene	ug/l		0.4U						2.0U	0.50U		0.50U		0.50U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	VOA	o-Xylene	ug/l		0.2UJ						1.0U	0.50U		0.50U		0.50U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	VOA	Toluene	ug/l		0.3U	0.5U					1.0U	0.50U		0.50U		0.10J		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-208	VOA	Xylenes	ug/l			1U					3.0U	1.0U		1.0U		1.0U		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-213 (AMW-213)	TPH	TPH-Diesel	ug/l			4840												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-213 (AMW-213)	TPH	TPH-Gasoline	ug/l			186												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-213 (AMW-213)	VOA	Benzene	ug/l			0.389J												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-213 (AMW-213)	VOA	Ethylbenzene	ug/l			3.56												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-213 (AMW-213)	VOA	Toluene	ug/l			0.5U												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-213 (AMW-213)	VOA	Xylenes	ug/l			5.59												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-215	TPH	TPH-Diesel	ug/l			1910												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-215	TPH	TPH-Gasoline	ug/l			82.7												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-215	VOA	Benzene	ug/l			0.516												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-215	VOA	Ethylbenzene	ug/l			2.72												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-215	VOA	Toluene	ug/l			0.5U												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-215	VOA	Xylenes	ug/l			6.5												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	C10-C24 Aliphatics	ug/l		93J													

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	C10-C24 Aromatics	ug/l		280J													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	C10-C25 Aliphatics	ug/l				280											
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	C10-C25 Aromatics	ug/l				240											
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	C25-C36 Aliphatics	ug/l		58UJ													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	C25-C36 Aromatics	ug/l		78UJ													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	C6-C9 Aliphatics	ug/l		34													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	C6-C9 Aromatics	ug/l		20U													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	TPH-Diesel	ug/l		370J		5000	2600		16000J								
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	TPH-Gasoline	ug/l		51													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	TPH-Heavy Fraction/Oil	ug/l				530											
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	VOA	Benzene	ug/l		0.2U													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	VOA	Ethylbenzene	ug/l		0.9													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	VOA	m,p-Xylene	ug/l		0.57													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	VOA	o-Xylene	ug/l		0.73J													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	VOA	Toluene	ug/l		0.3U													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-217 (AMW-217)	TPH	TPH-Diesel	ug/l			11000												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-217 (AMW-217)	TPH	TPH-Gasoline	ug/l			766J												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-217 (AMW-217)	VOA	Benzene	ug/l			30.1												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-217 (AMW-217)	VOA	Ethylbenzene	ug/l			48.9												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-217 (AMW-217)	VOA	Toluene	ug/l			2.02												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-217 (AMW-217)	VOA	Xylenes	ug/l			172												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	2-Methylnaphthalene	ug/l								0.14	0.02U	0.12	0.020U	0.43			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Acenaphthene	ug/l								0.10U	0.020U	0.010 J	0.11J	0.086			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Acenaphthylene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.028U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Anthracene	ug/l								0.10U	0.0034J	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Benzo(a)anthracene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Benzo(a)pyrene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Benzo(b)fluoranthene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Benzo(g,h,i)perylene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Benzo(k)fluoranthene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Chrysene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Dibenz(a,h)anthracene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Fluoranthene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.0084J			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Fluorene	ug/l								0.10U	0.020U	0.017 J	0.0091J	0.18			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Indeno(1,2,3-cd)pyrene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Naphthalene	ug/l								1.1	0.02U	0.58	0.11	1.4			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Phenanthrene	ug/l								0.10U	0.02U	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	SVOA	Pyrene	ug/l								0.10U	0.020U	0.020 U	0.020U	0.020U			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	TPH	C10-C24 Aliphatics	ug/l	100U	78U													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	TPH	C10-C24 Aromatics	ug/l	100U	150J													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	TPH	C25-C36 Aliphatics	ug/l	100U	58UJ													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	TPH	C25-C36 Aromatics	ug/l	100U	89													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	TPH	C6-C9 Aliphatics	ug/l	20U	25													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	TPH	C6-C9 Aromatics	ug/l	20U	20U													
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	TPH	TPH-Diesel	ug/l	150U	190	267	170U	3100	108J	233J	1700	120J	880Y	220Y	1600YJ	690Y		
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	TPH	TPH-Gasoline	ug/l	21	35	50U					25U	100U	17J	100U				
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	TPH	TPH-Heavy Fraction/Oil	ug/l				280U											
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	VOA	Benzene	ug/l	0.2U	0.2U	0.2U					1.0U	0.50U	0.50U		0.090J			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	VOA	BTEX (total)	ug/l	0.91														
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	VOA	Ethylbenzene	ug/l	0.22	0.59J	0.5U					0.61J	0.50U	0.34J		1.1			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	VOA	m,p-Xylene	ug/l	0.69	1.1						2.0U	0.50U	0.53		5.2			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	VOA	o-Xylene	ug/l	0.2U	0.2UJ						1.0U	0.50U	0.12J		0.29J			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	VOA	Toluene	ug/l	0.3U	0.3U	0.5U					1.0U	0.14J	0.50U		0.50U			

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South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	VOA	Xylenes	ug/l			1U					3.0U	1.0U	0.65J		5.49J			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-218	VOA	Xylenes (total)	ug/l	0.69							3.0U	1.0U	0.65J		5.49J			
South of Runway 18-36 Area	TANK FARM A AREA	WLM	LC6A (OLD 1)	TPH	TPH-Diesel	ug/l			4130												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	LC6A (OLD 1)	TPH	TPH-Gasoline	ug/l			338J												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	LC6A (OLD 1)	VOA	Benzene	ug/l			1.69												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	LC6A (OLD 1)	VOA	Ethylbenzene	ug/l			12												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	LC6A (OLD 1)	VOA	Toluene	ug/l			0.62												
South of Runway 18-36 Area	TANK FARM A AREA	WLM	LC6A (OLD 1)	VOA	Xylenes	ug/l			43.5												
South of Runway 18-36 Area	MAIN DAVIS ROAD PIPELINE	WLM	MRP-12	TPH	TPH-Diesel	ug/l			169J	160U	46J	96.1J	250U	52	36J		52U				
South of Runway 18-36 Area	MAIN DAVIS ROAD PIPELINE	WLM	MRP-12	TPH	TPH-Gasoline	ug/l			50U												
South of Runway 18-36 Area	MAIN DAVIS ROAD PIPELINE	WLM	MRP-12	TPH	TPH-Heavy Fraction/Oil	ug/l				280U											
South of Runway 18-36 Area	MAIN DAVIS ROAD PIPELINE	WLM	MRP-12	VOA	Benzene	ug/l			0.2U												
South of Runway 18-36 Area	MAIN DAVIS ROAD PIPELINE	WLM	MRP-12	VOA	Ethylbenzene	ug/l			0.5U												
South of Runway 18-36 Area	MAIN DAVIS ROAD PIPELINE	WLM	MRP-12	VOA	Toluene	ug/l			0.5U												
South of Runway 18-36 Area	MAIN DAVIS ROAD PIPELINE	WLM	MRP-12	VOA	Xylenes	ug/l			1U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	2-Methylnaphthalene	ug/l								0.096U		0.020U	0.020U	0.0042J	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Acenaphthene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Acenaphthylene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Anthracene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Benzo(a)anthracene	ug/l								0.096U		0.020U	0.020U	0.020U	0.0028J		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Benzo(a)pyrene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Benzo(b)fluoranthene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Benzo(g,h,i)perylene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Benzo(k)fluoranthene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Chrysene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Dibenz(a,h)anthracene	ug/l								0.096U		0.020U	0.020U	0.020U	0.0027		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Fluoranthene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Fluorene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Indeno(1,2,3-cd)pyrene	ug/l								0.096U		0.020U	0.020U	0.020U	0.0060J		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Naphthalene	ug/l								0.096U		0.020U	0.014J	0.045	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Phenanthrene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	SVOA	Pyrene	ug/l								0.096U		0.020U	0.020U	0.020U	0.020U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	TPH	TPH-Diesel	ug/l								120		81J	85U	77HJ	79		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	TPH	TPH-Gasoline	ug/l								25U		100U	100U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	VOA	Benzene	ug/l								1.0U		0.50U	0.50U	0.50U	0.50U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	VOA	Ethylbenzene	ug/l								1.0U		0.50U	0.50U	0.50U	0.50U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	VOA	Toluene	ug/l								1.0U		0.59U	0.50U	0.50U	0.11J		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	VOA	m,p-Xylene	ug/l								2.0U		0.12J	0.50U	0.50U	0.50U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	VOA	o-Xylene	ug/l								1.0U		0.50U	0.50U	0.50U	0.50U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RW	RW-18/36-03 (NW3)	VOA	Xylenes	ug/l								3.0U		0.12J	1.0U	1.0U	1.0U		
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,1,1,2-Tetrachloroethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,1,1-Trichloroethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,1,2,2-Tetrachloroethane	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,1,2-Trichloroethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,1-Dichloroethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,1-Dichloroethene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,1-Dichloropropene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,2,3-Trichlorobenzene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,2,3-Trichloropropane	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,2,4-Trichlorobenzene	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,2,4-Trimethylbenzene	ug/l				2.33											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,2-Dibromo-3-chloropropane	ug/l				2.5U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,2-Dibromoethane	ug/l				1U											

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South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,2-Dichlorobenzene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,2-Dichloroethane	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,2-Dichloropropane	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,3,5-Trimethylbenzene	ug/l				3.01											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,3-Dichlorobenzene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,3-Dichloropropane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	1,4-Dichlorobenzene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	2,2-Dichloropropane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	2-Butanone	ug/l				50U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	2-Chloroethyl vinyl ether	ug/l				10U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	2-Chlorotoluene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	2-Hexanone	ug/l				10U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	4-Chlorotoluene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	4-Isopropyltoluene	ug/l				3.93											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	4-Methyl-2-pentanone	ug/l				10U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Benzene	ug/l				0.5U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Bromobenzene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Bromochloromethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Bromodichloromethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Bromoform	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Bromomethane	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Carbon disulfide	ug/l				10U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Carbon tetrachloride	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Chlorobenzene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Chloroethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Chloroform	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Chloromethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	cis-1,2-Dichloroethene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	cis-1,3-Dichloropropene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Dibromochloromethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Dibromomethane	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Dichlorodifluoromethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Ethylbenzene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Hexachlorobutadiene	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Isopropylbenzene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	m,p-Xylene	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Methylene chloride	ug/l				5U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Naphthalene	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	n-Butylbenzene	ug/l				1.47											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	n-Propylbenzene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	o-Xylene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	sec-Butylbenzene	ug/l				1.65											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Styrene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	tert-Butylbenzene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Tetrachloroethene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Toluene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	trans-1,2-Dichloroethene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	trans-1,3-Dichloropropene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Trichloroethene	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Trichlorofluoromethane	ug/l				1U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-302	VOA	Vinyl chloride	ug/l				2U											
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-473	TPH	TPH-Diesel	ug/l			105												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-473	TPH	TPH-Gasoline	ug/l			50U												

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South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-473	VOA	Benzene	ug/l			0.2U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-473	VOA	Ethylbenzene	ug/l			0.5U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-473	VOA	Toluene	ug/l			0.5U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-473	VOA	Xylenes	ug/l			1U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-475	TPH	Benzene	ug/l			0.2UJ												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-475	TPH	Ethylbenzene	ug/l			0.5UJ												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-475	TPH	Toluene	ug/l			0.772J												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-475	TPH	TPH-Diesel	ug/l			44500												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-475	TPH	TPH-Gasoline	ug/l			203J												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-475	TPH	TPH-Heavy Fraction/Oil	ug/l			15800U												
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-475	TPH	Xylenes	ug/l			1.58J												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	DIN	Lead	ug/l					11	45.1	7.18	18.2	15.0	14.3	3.790				
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	DIN	Thallium	ug/l					0.15U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	2-Methylnaphthalene	ug/l					1										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Acenaphthene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Acenaphthylene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Anthracene	ug/l					0.33U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Benzo(a)anthracene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Benzo(a)pyrene	ug/l					0.07U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Benzo(b)fluoranthene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Benzo(g,h,i)perylene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Benzo(k)fluoranthene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	bis(2-Ethylhexyl)phthalate	ug/l						0.5U	0.523J								
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Chrysene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Dibenz(a,h)anthracene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Fluoranthene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Fluorene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Indeno(1,2,3-cd)pyrene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Naphthalene	ug/l					9.1										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Phenanthrene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	SVOA	Pyrene	ug/l					0.056U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	TIN	Lead	ug/l					12.3	51.3	7.82	18.7	16.7	14.2	3.650				
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	TIN	Thallium	ug/l					0.25U	0.12J									
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	TPH	C6-C10 Aliphatics	ug/l						111J									
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	TPH	C6-C10 Aromatics	ug/l						50UJ									
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	TPH	GRO - Aliphatic Fraction	ug/l					670										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	TPH	GRO - Aromatic Fraction	ug/l					1000										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	TPH	TPH-Diesel	ug/l					540	800		860		430Y					
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	TPH	TPH-Gasoline	ug/l					1700	181	122J	190		100Z					
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	1,1-Dichloroethene	ug/l					10U	1U	1U	1.0U	0.50U	0.50U	0.50U	0.50U		0.50U	0.50U
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	Benzene	ug/l					4U	0.5U	0.5U	1.0U		0.50U					
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	cis-1,2-Dichloroethene	ug/l					10U	1U	1U	1.0U	0.50U	0.50U	0.50U	0.50U		0.50U	0.50U
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	Ethylbenzene	ug/l					180	0.5U	0.6	8.7		0.34J					
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	m,p-Xylene	ug/l					430			11		0.50					
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	Methyl Tert-Butyl Ether	ug/l					4U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	Methylene chloride	ug/l					2.3U	5U	2U								
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	o-Xylene	ug/l					164.12			1.0U		0.50U					
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	Tetrachloroethene	ug/l					27	7.74	6.75	11	8.2	7.2	3.6	6.0		3.9	2.3
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	Toluene	ug/l					280	0.5U	0.26J	0.69J		1.1U					
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	trans-1,2-Dichloroethene	ug/l					10U	1U	1U	1.0U	0.50U	0.50U	0.50U	0.50U		0.50U	0.50U
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	Trichloroethene	ug/l					10U	1U	1U	1.0U	0.27J	0.18J	0.50U	0.19J		0.21 J	0.22J
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	Vinyl chloride	ug/l					10UJ	1U	1U	1.0U	0.50U	0.50U	0.50U	0.50U		0.50U	0.50U
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	01-153	VOA	Xylenes	ug/l						1U	1.28	11		0.50					

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SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	DIN	Antimony	ug/l				0.202											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	DIN	Lead	ug/l	42.2J	32.6	29	21.7	84.6	25.3	20.8	15.0	36.8J	23.8	17.5	13.8		17	27.9
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	1,2,4-Trichlorobenzene	ug/l			25U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	1,2-Dichlorobenzene	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	1,3-Dichlorobenzene	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	1,4-Dichlorobenzene	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2,2-oxybis(1-Chloropropane)	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2,4,5-Trichlorophenol	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2,4,6-Trichlorophenol	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2,4-Dichlorophenol	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2,4-Dimethylphenol	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2,4-Dinitrophenol	ug/l			180U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2,4-Dinitrotoluene	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2,6-Dinitrotoluene	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2-Chloronaphthalene	ug/l			25U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2-Chlorophenol	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2-Methylnaphthalene	ug/l			25U	0.05U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2-Methylphenol	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2-Nitroaniline	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	2-Nitrophenol	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	3,3-Dichlorobenzidine	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	3-Nitroaniline	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	4,6-Dinitro-2-methylphenol	ug/l			180U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	4-Bromophenyl-phenylether	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	4-Chloro-3-methylphenol	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	4-Chloroaniline	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	4-Chlorophenyl-phenylether	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	4-Nitroaniline	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	4-Nitrophenol	ug/l			140U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Acenaphthene	ug/l			25U	0.05U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Acenaphthylene	ug/l			20U	0.05U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Aniline	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Anthracene	ug/l			20U	0.3U	0.32U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Azobenzene	ug/l			200U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Benzo(a)anthracene	ug/l			20U	0.05U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Benzo(a)pyrene	ug/l			20U	0.063U	0.067U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Benzo(b)fluoranthene	ug/l			20U	0.05U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Benzo(g,h,i)perylene	ug/l			25U	0.09U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Benzo(k)fluoranthene	ug/l			25U	0.1U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Benzoic acid	ug/l			51U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Benzyl alcohol	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	bis(2-Chloroethoxy)methane	ug/l			25U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	bis(2-Chloroethyl)ether	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	bis(2-Ethylhexyl)phthalate	ug/l			20U		2.7U	0.5U									
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Butylbenzylphthalate	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Chrysene	ug/l			20U	0.05U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Cresols	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Dibenz(a,h)anthracene	ug/l			25U	0.15U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Dibenzofuran	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Diethylphthalate	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Dimethylphthalate	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Di-n-butylphthalate	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Di-n-octylphthalate	ug/l			20U												

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SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Fluoranthene	ug/l			20U	0.05U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Fluorene	ug/l			20U	0.12U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Hexachlorobenzene	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Hexachlorobutadiene	ug/l			30U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Hexachlorocyclopentadiene	ug/l			30U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Hexachloroethane	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			20U	0.2U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Isophorone	ug/l			25U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Naphthalene	ug/l			20U	2.3	1.5										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Nitrobenzene	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	N-Nitrosodimethylamine	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	N-Nitrosodinpropylamine	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	N-Nitrosodiphenylamine	ug/l			20U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Pentachlorophenol	ug/l			140U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Phenanthrene	ug/l			20U	0.05U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Phenol	ug/l			10U												
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	SVOA	Pyrene	ug/l			20U	0.05U	0.053U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TIN	Antimony	ug/l				0.5U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TIN	Lead	ug/l	42.3J	31.9	30.6	29.8	83.6	21.5	22.3	14.7	41.5J	24.3	16.7	14.4		17.2	28.5
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TIN	Thallium	ug/l				0.25U	0.25U	0.07UJ									
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	C10-C24 Aliphatics	ug/l	100	82U													
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	C10-C24 Aromatics	ug/l	1400J	720J													
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	C25-C36 Aliphatics	ug/l	100U	61U													
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	C25-C36 Aromatics	ug/l	100U	81U													
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	C6-C10 Aliphatics	ug/l				6300		9650J									
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	C6-C10 Aromatics	ug/l				5500		10200J									
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	C6-C9 Aliphatics	ug/l	10000	7500													
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	C6-C9 Aromatics	ug/l	9300	7700													
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	GRO - Aliphatic Fraction	ug/l			10300		4600										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	GRO - Aromatic Fraction	ug/l			5590		8100										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	TPH-Diesel	ug/l	1500J	720J	3900	3000	3800	1720	2770J	2100	4100Z	2500Z	3200Y	1900Z	5100L	3100LJ	2900Y
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	TPH-Gasoline	ug/l	18000	15000	15900	12000	13000	19800	12600J	9900	14000DY	11000DY	15000DY	9000DY	11000DY	7000Y	4700Y
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	TPH	TPH-Heavy Fraction/Oil	ug/l			1120U	360											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,1,1,2-Tetrachloroethane	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,1,1-Trichloroethane	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,1,2,2-Tetrachloroethane	ug/l			10U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,1,2-Trichloroethane	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,1,2-Trichlorotrifluoroethane	ug/l				2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,1-Dichloroethane	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,1-Dichloroethene	ug/l			5U	2U	40U	10U	10U								
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,1-Dichloropropene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,2,3-Trichlorobenzene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,2,3-Trichloropropane	ug/l			10U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,2,4-Trichlorobenzene	ug/l			10U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,2,4-Trimethylbenzene	ug/l			1150	810											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,2-Dibromo-3-chloropropane	ug/l			12.5U	10U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,2-Dibromoethane	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,2-Dichlorobenzene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,2-Dichloroethane	ug/l			10U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,2-Dichloropropane	ug/l			10U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,3,5-Trimethylbenzene	ug/l			437	290											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,3-Dichlorobenzene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,3-Dichloropropane	ug/l			5U	2U											

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SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	1,4-Dichlorobenzene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	2,2-Dichloropropane	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	2-Butanone	ug/l			250U	50U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	2-Chloroethyl vinyl ether	ug/l			50U	10U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	2-Chlorotoluene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	2-Hexanone	ug/l			50U	20U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	4-Chlorotoluene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	4-Isopropyltoluene	ug/l			10.2	8.9											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	4-Methyl-2-pentanone	ug/l			50U	20U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Acetone	ug/l				50U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Acrylonitrile	ug/l				10U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Benzene	ug/l	20U	20U	20.1	16	40U	5U	5U	1.0U							
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Bromobenzene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Bromochloromethane	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Bromodichloromethane	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Bromoform	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Bromomethane	ug/l			10U	5U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	BTEX (total)	ug/l	5270														
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Carbon disulfide	ug/l			50U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Carbon tetrachloride	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Chlorobenzene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Chloroethane	ug/l			5U	5U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Chloroform	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Chloromethane	ug/l			5U	5U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	cis-1,2-Dichloroethene	ug/l			5U	2U	40U	10U	10U								
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	cis-1,3-Dichloropropene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Dibromochloromethane	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Dibromomethane	ug/l			10U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Dichlorodifluoromethane	ug/l			5U	5U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Ethylbenzene	ug/l	530	420J	413	310	440	461J	502J	290							
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Hexachlorobutadiene	ug/l			10U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Iodomethane	ug/l				5U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Isopropylbenzene	ug/l			49.1	50											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	m,p-Xylene	ug/l	2800	2600	2290	1500	2400			1800							
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Methyl Tert-Butyl Ether	ug/l				2U	40U										
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Methylene chloride	ug/l			25U	5U	54U	50U	20U	1.0U							
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Naphthalene	ug/l			143	130											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	n-Butylbenzene	ug/l			16.7	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	n-Propylbenzene	ug/l			130	130											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	o-Xylene	ug/l	1300	1300	1070	790	1252.4			830							
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	sec-Butylbenzene	ug/l			7.7	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Styrene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	tert-Butylbenzene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Tetrachloroethene	ug/l			5U	1.6J	40U	2.4J	2.1J								
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Toluene	ug/l	660	370	361	190	210	87.6J	22.2J	3.5							
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	trans-1,2-Dichloroethene	ug/l			5U	2U	40U	10U	10U								
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	trans-1,3-Dichloropropene	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	trans-1,4-Dichloro-2-butene	ug/l				10U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Trichloroethene	ug/l			5U	2U	40U	10U	10U								
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Trichlorofluoromethane	ug/l			5U	2U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Vinyl acetate	ug/l				5U											
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Vinyl chloride	ug/l			10U	2U	40UJ	10U	10U								
SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Xylenes	ug/l				2300		3610J	3930J	2630							

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SWMU 14, Old Pesticide Storage and Disposal Area	AREA AND GAS STATION	WLM	MW-14-5	VOA	Xylenes (total)	ug/l	4100							2630							
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	DIN	Lead	ug/l	1U	0.1UJ	0.3U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	1,2,4-Trichlorobenzene	ug/l			29U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	1,2-Dichlorobenzene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	1,3-Dichlorobenzene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	1,4-Dichlorobenzene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2,2-oxybis(1-Chloropropane)	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2,4,5-Trichlorophenol	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2,4,6-Trichlorophenol	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2,4-Dichlorophenol	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2,4-Dimethylphenol	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2,4-Dinitrophenol	ug/l			210U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2,4-Dinitrotoluene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2,6-Dinitrotoluene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2-Chloronaphthalene	ug/l			29U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2-Chlorophenol	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2-Methylnaphthalene	ug/l			29U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2-Methylphenol	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2-Nitroaniline	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	2-Nitrophenol	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	3,3-Dichlorobenzidine	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	3-Nitroaniline	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	4,6-Dinitro-2-methylphenol	ug/l			210U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	4-Bromophenyl-phenylether	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	4-Chloro-3-methylphenol	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	4-Chloroaniline	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	4-Chlorophenyl-phenylether	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	4-Nitroaniline	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	4-Nitrophenol	ug/l			160U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Acenaphthene	ug/l			29U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Acenaphthylene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Aniline	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Anthracene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Azobenzene	ug/l			230U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Benzo(a)anthracene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Benzo(a)pyrene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Benzo(b)fluoranthene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Benzo(g,h,i)perylene	ug/l			29U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Benzo(k)fluoranthene	ug/l			29U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Benzoic acid	ug/l			57U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Benzyl alcohol	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	bis(2-Chloroethoxy)methane	ug/l			29U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	bis(2-Chloroethyl)ether	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	bis(2-Ethylhexyl)phthalate	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Butylbenzylphthalate	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Chrysene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Cresols	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Dibenz(a,h)anthracene	ug/l			29U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Dibenzofuran	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Diethylphthalate	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Dimethylphthalate	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Di-n-butylphthalate	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Di-n-octylphthalate	ug/l			23U												

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Fluoranthene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Fluorene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Hexachlorobenzene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Hexachlorobutadiene	ug/l			34U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Hexachlorocyclopentadiene	ug/l			34U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Hexachloroethane	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Isophorone	ug/l			29U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Naphthalene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Nitrobenzene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	N-Nitrosodimethylamine	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	N-Nitrosodinpropylamine	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	N-Nitrosodiphenylamine	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Pentachlorophenol	ug/l			160U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Phenanthrene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Phenol	ug/l			11U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	SVOA	Pyrene	ug/l			23U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TIN	Lead	ug/l	1U	0.1UJ	2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	C10-C24 Aliphatics	ug/l	100U	80U													
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	C10-C24 Aromatics	ug/l	100U	80UJ													
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	C25-C36 Aromatics	ug/l	100U	77U													
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	TPH-Diesel	ug/l	160UJ	160UJ	581U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	TPH-Gasoline	ug/l	20U	20U	90U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	TPH	TPH-Heavy Fraction/Oil	ug/l			1160U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,1,1-Trichloroethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,1,2-Trichloroethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,1-Dichloroethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,1-Dichloroethene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,1-Dichloropropene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,2,3-Trichlorobenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,2,3-Trichloropropane	ug/l			2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,2,4-Trichlorobenzene	ug/l			2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,2,4-Trimethylbenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,2-Dibromoethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,2-Dichlorobenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,2-Dichloroethane	ug/l			2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,2-Dichloropropane	ug/l			2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,3,5-Trimethylbenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,3-Dichlorobenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,3-Dichloropropane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	1,4-Dichlorobenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	2,2-Dichloropropane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	2-Butanone	ug/l			50U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	2-Chloroethyl vinyl ether	ug/l			10U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	2-Chlorotoluene	ug/l			1U												

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SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	2-Hexanone	ug/l			10U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	4-Chlorotoluene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	4-Isopropyltoluene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	4-Methyl-2-pentanone	ug/l			10U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Benzene	ug/l	0.2U	0.2U	0.5U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Bromobenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Bromochloromethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Bromodichloromethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Bromoform	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Bromomethane	ug/l			2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	BTEX (total)	ug/l	0.4U														
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Carbon disulfide	ug/l			10U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Carbon tetrachloride	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Chlorobenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Chloroethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Chloroform	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Chloromethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	cis-1,2-Dichloroethene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	cis-1,3-Dichloropropene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Dibromochloromethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Dibromomethane	ug/l			2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Dichlorodifluoromethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Ethylbenzene	ug/l	0.2U	0.2U	1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Hexachlorobutadiene	ug/l			2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Isopropylbenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Methylene chloride	ug/l			5U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Naphthalene	ug/l			2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	n-Butylbenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	n-Propylbenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	o-Xylene	ug/l	0.2U	0.2U	1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	sec-Butylbenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Styrene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	tert-Butylbenzene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Tetrachloroethene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Toluene	ug/l	0.3U	0.3U	1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	trans-1,2-Dichloroethene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	trans-1,3-Dichloropropene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Trichloroethene	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Trichlorofluoromethane	ug/l			1U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Vinyl chloride	ug/l			2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	AREA AND GAS STATION	WLM	MW14-423	VOA	Xylenes (total)	ug/l	0.4U														
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WL	MW-146-3	TPH	Benzene	ug/l			0.4U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WL	MW-146-3	TPH	Ethylbenzene	ug/l			19.3												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WL	MW-146-3	TPH	Toluene	ug/l			5.34												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WL	MW-146-3	TPH	TPH-Diesel	ug/l			15900												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WL	MW-146-3	TPH	TPH-Gasoline	ug/l			350UJ												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WL	MW-146-3	TPH	Xylenes	ug/l			72.1												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WLM	MW-146-4	TPH	Benzene	ug/l			0.2U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WLM	MW-146-4	TPH	Ethylbenzene	ug/l			3.57J												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WLM	MW-146-4	TPH	Toluene	ug/l			0.5U												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WLM	MW-146-4	TPH	TPH-Diesel	ug/l			6250J												
SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WLM	MW-146-4	TPH	TPH-Gasoline	ug/l			114UJ												

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SWMU14-OLD PESTICIDE DISPOSAL AREA AND GAS STATION	DOWNTOWN HOUSING AREA	WLM	MW-146-4	TPH	Xylenes	ug/l			16.3J												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	1,2,4-Trichlorobenzene	ug/l			27U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	1,2-Dichlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	1,3-Dichlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	1,4-Dichlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2,2-oxybis(1-Chloropropane)	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2,4,5-Trichlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2,4,6-Trichlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2,4-Dichlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2,4-Dimethylphenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2,4-Dinitrophenol	ug/l			200U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2,4-Dinitrotoluene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2,6-Dinitrotoluene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2-Chloronaphthalene	ug/l			27U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2-Chlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2-Methylnaphthalene	ug/l			27U	12											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2-Methylphenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2-Nitroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	2-Nitrophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	3,3-Dichlorobenzidine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	3-Nitroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	4,6-Dinitro-2-methylphenol	ug/l			200U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	4-Bromophenyl-phenylether	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	4-Chloro-3-methylphenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	4-Chloroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	4-Chlorophenyl-phenylether	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	4-Nitroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	4-Nitrophenol	ug/l			150U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Acenaphthene	ug/l			27U	0.92											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Acenaphthylene	ug/l			22U	0.27											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Aniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Anthracene	ug/l			22U	0.31U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Azobenzene	ug/l			220U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Benzo(a)anthracene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Benzo(a)pyrene	ug/l			22U	0.073											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Benzo(b)fluoranthene	ug/l			22U	0.083											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Benzo(g,h,i)perylene	ug/l			27U	0.094U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Benzo(k)fluoranthene	ug/l			27U	0.1U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Benzoic acid	ug/l			55U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Benzyl alcohol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	bis(2-Chloroethoxy)methane	ug/l			27U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	bis(2-Chloroethyl)ether	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	bis(2-Ethylhexyl)phthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Butylbenzylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Chrysene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Cresols	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Dibenz(a,h)anthracene	ug/l			27U	0.16U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Dibenzofuran	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Diethylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Dimethylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Di-n-butylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Di-n-octylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Fluoranthene	ug/l			22U	0.1											

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Fluorene	ug/l			22U	2.9											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Hexachlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Hexachlorobutadiene	ug/l			33U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Hexachlorocyclopentadiene	ug/l			33U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Hexachloroethane	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			22U	0.21U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Isophorone	ug/l			27U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Naphthalene	ug/l			22U	4.5											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Nitrobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	N-Nitrosodimethylamine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	N-Nitrosodinpropylamine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	N-Nitrosodiphenylamine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Pentachlorophenol	ug/l			150U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Phenanthrene	ug/l			22U	1.4											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Phenol	ug/l			11U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	SVOA	Pyrene	ug/l			22U	0.073											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	TPH	TPH-Diesel	ug/l			698	460	480	600	554J	680	760Y	640Y		690Y		600Y	
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	TPH	TPH-Gasoline	ug/l			90U	18J	43U	37.5UJ	80U	41							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	TPH	TPH-Heavy Fraction/Oil	ug/l			1090U	290											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,1,1-Trichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,1,2-Trichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,1,2-Trichlorotrifluoroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,1-Dichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,1-Dichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,1-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,2,3-Trichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,2,3-Trichloropropane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,2,4-Trichlorobenzene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,2,4-Trimethylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U	10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,2-Dibromoethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,2-Dichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,2-Dichloroethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,2-Dichloropropane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,3,5-Trimethylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,3-Dichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,3-Dichloropropane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	1,4-Dichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	2,2-Dichloropropane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	2-Butanone	ug/l			50U	50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	2-Chloroethyl vinyl ether	ug/l			10U	10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	2-Chlorotoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	2-Hexanone	ug/l			10U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	4-Chlorotoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	4-Isopropyltoluene	ug/l			1U	0.5J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	4-Methyl-2-pentanone	ug/l			10U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Acetone	ug/l				50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Acrylonitrile	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Benzene	ug/l			0.5U	1U	2U	0.5U	0.33J	0.85J							

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Bromobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Bromochloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Bromodichloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Bromoform	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Bromomethane	ug/l			2U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Carbon disulfide	ug/l			10U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Carbon tetrachloride	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Chlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Chloroethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Chloroform	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Chloromethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	cis-1,2-Dichloroethene	ug/l			1U	0.79J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	cis-1,3-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Dibromochloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Dibromomethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Dichlorodifluoromethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Ethylbenzene	ug/l			1U	1U	2U	0.23J	0.29J	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Hexachlorobutadiene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Iodomethane	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Isopropylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	m,p-Xylene	ug/l			2U	2U	2U			2.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Methyl Tert-Butyl Ether	ug/l				2U	2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Methylene chloride	ug/l			5U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Naphthalene	ug/l			6.06	4.3											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	n-Butylbenzene	ug/l			2.51	0.92J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	n-Propylbenzene	ug/l			2.06	2.2											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	o-Xylene	ug/l			1U	2U	2U			1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	sec-Butylbenzene	ug/l			1U	0.84J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Styrene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	tert-Butylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Tetrachloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Toluene	ug/l			1U	1U	2U	0.5U	0.5U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	trans-1,2-Dichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	trans-1,3-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	trans-1,4-Dichloro-2-butene	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Trichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Trichlorofluoromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Vinyl acetate	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Vinyl chloride	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-375	VOA	Xylenes	ug/l				3U		1U	1U	3.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	1,2,4-Trichlorobenzene	ug/l			27U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	1,2-Dichlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	1,3-Dichlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	1,4-Dichlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2,2-Dichloropropane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2,2-oxybis(1-Chloropropane)	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2,4,5-Trichlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2,4,6-Trichlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2,4-Dichlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2,4-Dimethylphenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2,4-Dinitrophenol	ug/l			200U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2,4-Dinitrotoluene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2,6-Dinitrotoluene	ug/l			22U												

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2-Chloronaphthalene	ug/l			27U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2-Chlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2-Methylnaphthalene	ug/l			27U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2-Methylphenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2-Nitroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	2-Nitrophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	3,3-Dichlorobenzidine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	3-Nitroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	4,6-Dinitro-2-methylphenol	ug/l			200U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	4-Bromophenyl-phenylether	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	4-Chloro-3-methylphenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	4-Chloroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	4-Chlorophenyl-phenylether	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	4-Nitroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	4-Nitrophenol	ug/l			150U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Acenaphthene	ug/l			27U	0.073											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Acenaphthylene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Aniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Anthracene	ug/l			22U	0.31U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Azobenzene	ug/l			220U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Benzo(a)anthracene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Benzo(a)pyrene	ug/l			22U	0.066U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Benzo(b)fluoranthene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Benzo(g,h,i)perylene	ug/l			27U	0.094U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Benzo(k)fluoranthene	ug/l			27U	0.1U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Benzoic acid	ug/l			54U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Benzyl alcohol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	bis(2-Chloroethoxy)methane	ug/l			27U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	bis(2-Chloroethyl)ether	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	bis(2-Ethylhexyl)phthalate	ug/l			22U		5.3U	0.5UJ	0.776UJ								
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Butylbenzylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Chrysene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Cresols	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Dibenz(a,h)anthracene	ug/l			27U	0.16U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Dibenzofuran	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Diethylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Dimethylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Di-n-butylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Di-n-octylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Fluoranthene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Fluorene	ug/l			22U	0.13U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Hexachlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Hexachlorobutadiene	ug/l			33U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Hexachlorocyclopentadiene	ug/l			33U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Hexachloroethane	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			22U	0.21U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Isophorone	ug/l			27U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Naphthalene	ug/l			22U	0.25U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Nitrobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	N-Nitrosodimethylamine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	N-Nitrosodinpropylamine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	N-Nitrosodiphenylamine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Pentachlorophenol	ug/l			150U												

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Phenanthrene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Phenol	ug/l			11U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	SVOA	Pyrene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,1,1-Trichloroethane	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,1,2-Trichloroethane	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,1,2-Trichlorotrifluoroethane	ug/l				20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,1-Dichloroethane	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,1-Dichloroethene	ug/l			1U	20U	1.1J	5U	5U	1.1	0.90JD	0.95	0.74	0.96	0.68	0.75	0.73
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,1-Dichloropropene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,2,3-Trichlorobenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,2,3-Trichloropropane	ug/l			2U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,2,4-Trichlorobenzene	ug/l			2U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,2,4-Trimethylbenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U	100U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,2-Dibromoethane	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,2-Dichlorobenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,2-Dichloroethane	ug/l			2U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,2-Dichloropropane	ug/l			2U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,3,5-Trimethylbenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,3-Dichlorobenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,3-Dichloropropane	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	1,4-Dichlorobenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	2-Butanone	ug/l			50U	500U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	2-Chloroethyl vinyl ether	ug/l			10U	100U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	2-Chlorotoluene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	2-Hexanone	ug/l			10U	200U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	4-Chlorotoluene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	4-Isopropyltoluene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	4-Methyl-2-pentanone	ug/l			10U	200U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Acetone	ug/l				57J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Acrylonitrile	ug/l				100U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Benzene	ug/l			0.5U	20U						0.080J					
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Bromobenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Bromochloromethane	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Bromodichloromethane	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Bromoform	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Bromomethane	ug/l			2U	50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Carbon disulfide	ug/l			10U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Carbon tetrachloride	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Chlorobenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Chloroethane	ug/l			1U	50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Chloroform	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Chloromethane	ug/l			1U	50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	cis-1,2-Dichloroethene	ug/l			189	420	730	483J	542J	420	570D	340JD	340D	400D	280DJ	240D	180D
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	cis-1,3-Dichloropropene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Dibromochloromethane	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Dibromomethane	ug/l			2U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Dichlorodifluoromethane	ug/l			1U	50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Ethylbenzene	ug/l			1U	20U						0.50U					
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Hexachlorobutadiene	ug/l			2U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Iodomethane	ug/l				50U											

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Isopropylbenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	m,p-Xylene	ug/l			2U	20U						0.50U					
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Methyl Tert-Butyl Ether	ug/l				20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Methylene chloride	ug/l			5U	15J	5U	25U	10U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Naphthalene	ug/l			2U	13J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	n-Butylbenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	n-Propylbenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	o-Xylene	ug/l			1U	20U						0.50U					
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	sec-Butylbenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Styrene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	tert-Butylbenzene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Tetrachloroethene	ug/l			10	20U	3.2	10.4J	7.25J	8.5	4.7D	5.7	2.5	1.3	1.6	0.90	0.58
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Toluene	ug/l			1U	20U						0.72 U					
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	trans-1,2-Dichloroethene	ug/l			18.6	19J	25	28.6J	25.5J	22	18D	21	18	18	13	13	11
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	trans-1,3-Dichloropropene	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	trans-1,4-Dichloro-2-butene	ug/l				100U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Trichloroethene	ug/l			4.45	20U	3.5	5.1J	5.45J	4.4	3.0D	3.7	2.8	2.3	2.6	1.6	1.2
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Trichlorofluoromethane	ug/l			1U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Vinyl acetate	ug/l				50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-735	VOA	Vinyl chloride	ug/l			4.18	5.6J	7	6.7J	7.2J	7.4	3.4D	6.1	5.4	4.3	2.8	2.7	3.2
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	1,2,4-Trichlorobenzene	ug/l			29U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	1,2-Dichlorobenzene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	1,3-Dichlorobenzene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	1,4-Dichlorobenzene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2,2-oxybis(1-Chloropropane)	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2,4,5-Trichlorophenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2,4,6-Trichlorophenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2,4-Dichlorophenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2,4-Dimethylphenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2,4-Dinitrophenol	ug/l			210U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2,4-Dinitrotoluene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2,6-Dinitrotoluene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2-Chloronaphthalene	ug/l			29U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2-Chlorophenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2-Methylnaphthalene	ug/l			29U	0.083J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2-Methylphenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2-Nitroaniline	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	2-Nitrophenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	3,3-Dichlorobenzidine	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	3-Nitroaniline	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	4,6-Dinitro-2-methylphenol	ug/l			210U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	4-Bromophenyl-phenylether	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	4-Chloro-3-methylphenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	4-Chloroaniline	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	4-Chlorophenyl-phenylether	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	4-Nitroaniline	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	4-Nitrophenol	ug/l			160U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Acenaphthene	ug/l			29U	0.17											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Acenaphthylene	ug/l			23U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Aniline	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Anthracene	ug/l			23U	0.31U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Azobenzene	ug/l			230U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Benzo(a)anthracene	ug/l			23U	0.052U											

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Benzo(a)pyrene	ug/l			23U	0.066U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Benzo(b)fluoranthene	ug/l			23U	0.063											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Benzo(g,h,i)perylene	ug/l			29U	0.094U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Benzo(k)fluoranthene	ug/l			29U	0.1U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Benzoic acid	ug/l			58U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Benzyl alcohol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	bis(2-Chloroethoxy)methane	ug/l			29U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	bis(2-Chloroethyl)ether	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	bis(2-Ethylhexyl)phthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Butylbenzylphthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Chrysene	ug/l			23U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Cresols	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Dibenz(a,h)anthracene	ug/l			29U	0.16U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Dibenzofuran	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Diethylphthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Dimethylphthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Di-n-butylphthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Di-n-octylphthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Fluoranthene	ug/l			23U	0.073											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Fluorene	ug/l			23U	0.13U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Hexachlorobenzene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Hexachlorobutadiene	ug/l			35U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Hexachlorocyclopentadiene	ug/l			35U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Hexachloroethane	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			23U	0.21U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Isophorone	ug/l			29U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Naphthalene	ug/l			23U	0.25U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Nitrobenzene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	N-Nitrosodimethylamine	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	N-Nitrosodinpropylamine	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	N-Nitrosodiphenylamine	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Pentachlorophenol	ug/l			160U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Phenanthrene	ug/l			23U	0.052											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Phenol	ug/l			12U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	SVOA	Pyrene	ug/l			23U	0.052											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	TPH	C10-C24 Aliphatics	ug/l	100U	79U													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	TPH	C10-C24 Aromatics	ug/l	110U	79UJ													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	TPH	C25-C36 Aliphatics	ug/l	100U	59U													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	TPH	C25-C36 Aromatics	ug/l	100U	79U													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	TPH	TPH-Diesel	ug/l	200U	160UJ	549U	160U	100U	250U	245U	54U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	TPH	TPH-Gasoline	ug/l	20U	20U		7.3J	12U	19.3UJ	80U	25U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	TPH	TPH-Heavy Fraction/Oil	ug/l			1100U	280U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,1,1-Trichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,1,2-Trichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,1,2-Trichlorotrifluoroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,1-Dichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,1-Dichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,1-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,2,3-Trichlorobenzene	ug/l			1U	2U											

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,2,3-Trichloropropane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,2,4-Trichlorobenzene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,2,4-Trimethylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U	10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,2-Dibromoethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,2-Dichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,2-Dichloroethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,2-Dichloropropane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,3,5-Trimethylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,3-Dichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,3-Dichloropropane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	1,4-Dichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	2,2-Dichloropropane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	2-Butanone	ug/l			50U	50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	2-Chloroethyl vinyl ether	ug/l			10U	10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	2-Chlorotoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	2-Hexanone	ug/l			10U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	4-Chlorotoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	4-Isopropyltoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	4-Methyl-2-pentanone	ug/l			10U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Acetone	ug/l				50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Acrylonitrile	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Benzene	ug/l	0.4U	0.2U	0.5U	1U	2U	0.5U	0.5U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Bromobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Bromochloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Bromodichloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Bromoform	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Bromomethane	ug/l			2U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	BTEX (total)	ug/l	0.8U														
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Carbon disulfide	ug/l			10U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Carbon tetrachloride	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Chlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Chloroethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Chloroform	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Chloromethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	cis-1,2-Dichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	cis-1,3-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Dibromochloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Dibromomethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Dichlorodifluoromethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Ethylbenzene	ug/l	0.4U	0.2U	1U	1U	2U	0.5U	0.5U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Hexachlorobutadiene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Iodomethane	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Isopropylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	m,p-Xylene	ug/l	0.8U	0.4U	2U	2U	2U			2.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Methyl Tert-Butyl Ether	ug/l				2U	2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Methylene chloride	ug/l			5U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Naphthalene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	n-Butylbenzene	ug/l			1.03	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	n-Propylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	o-Xylene	ug/l	0.4U	0.2U	1U	2U	2U			1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	sec-Butylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Styrene	ug/l			1U	2U											

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	tert-Butylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Tetrachloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Toluene	ug/l	0.6U	0.3U	1U	1U	2U	0.5U	0.5U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	trans-1,2-Dichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	trans-1,3-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	trans-1,4-Dichloro-2-butene	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Trichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Trichlorofluoromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Vinyl acetate	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Vinyl chloride	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Xylenes	ug/l				3U		1U	1U	3.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-810	VOA	Xylenes (total)	ug/l	0.8U							3.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	1,2,4-Trichlorobenzene	ug/l			29U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	1,2-Dichlorobenzene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	1,3-Dichlorobenzene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	1,4-Dichlorobenzene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2,2-oxybis(1-Chloropropane)	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2,4,5-Trichlorophenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2,4,6-Trichlorophenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2,4-Dichlorophenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2,4-Dimethylphenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2,4-Dinitrophenol	ug/l			210U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2,4-Dinitrotoluene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2,6-Dinitrotoluene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2-Chloronaphthalene	ug/l			29U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2-Chlorophenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2-Methylnaphthalene	ug/l			29U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2-Methylphenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2-Nitroaniline	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	2-Nitrophenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	3,3-Dichlorobenzidine	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	3-Nitroaniline	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	4,6-Dinitro-2-methylphenol	ug/l			210U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	4-Bromophenyl-phenylether	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	4-Chloro-3-methylphenol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	4-Chloroaniline	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	4-Chlorophenyl-phenylether	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	4-Nitroaniline	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	4-Nitrophenol	ug/l			160U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Acenaphthene	ug/l			29U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Acenaphthylene	ug/l			23U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Aniline	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Anthracene	ug/l			23U	0.31U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Azobenzene	ug/l			230U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Benzo(a)anthracene	ug/l			23U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Benzo(a)pyrene	ug/l			23U	0.066U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Benzo(b)fluoranthene	ug/l			23U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Benzo(g,h,i)perylene	ug/l			29U	0.094U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Benzo(k)fluoranthene	ug/l			29U	0.1U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Benzoic acid	ug/l			57U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Benzyl alcohol	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	bis(2-Chloroethoxy)methane	ug/l			29U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	bis(2-Chloroethyl)ether	ug/l			23U												

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	bis(2-Ethylhexyl)phthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Butylbenzylphthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Chrysene	ug/l			23U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Cresols	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Dibenz(a,h)anthracene	ug/l			29U	0.16U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Dibenzofuran	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Diethylphthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Dimethylphthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Di-n-butylphthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Di-n-octylphthalate	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Fluoranthene	ug/l			23U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Fluorene	ug/l			23U	0.13U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Hexachlorobenzene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Hexachlorobutadiene	ug/l			34U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Hexachlorocyclopentadiene	ug/l			34U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Hexachloroethane	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			23U	0.21U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Isophorone	ug/l			29U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Naphthalene	ug/l			23U	0.25U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Nitrobenzene	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	N-Nitrosodimethylamine	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	N-Nitrosodinpropylamine	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	N-Nitrosodiphenylamine	ug/l			23U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Pentachlorophenol	ug/l			160U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Phenanthrene	ug/l			23U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Phenol	ug/l			11U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	SVOA	Pyrene	ug/l			23U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	C10-C24 Aliphatics	ug/l	100U	82UJ													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	C10-C24 Aromatics	ug/l	100U	82UJ													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	C25-C36 Aliphatics	ug/l	100U	62UJ													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	C25-C36 Aromatics	ug/l	100U	82UJ													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	C6-C9 Aliphatics	ug/l	20UJ	20U													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	TPH-Diesel	ug/l	160U	160UJ	581U	160U	100U	250U	248U	56U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	TPH-Gasoline	ug/l	20U	20U	90U	50U	9.9U	80U	80U	25U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	TPH	TPH-Heavy Fraction/Oil	ug/l			1160U	280U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,1,1-Trichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,1,2-Trichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,1,2-Trichlorotrifluoroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,1-Dichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,1-Dichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,1-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,2,3-Trichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,2,3-Trichloropropane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,2,4-Trichlorobenzene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,2,4-Trimethylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U	10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,2-Dibromoethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,2-Dichlorobenzene	ug/l			1U	2U											

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,2-Dichloroethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,2-Dichloropropane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,3,5-Trimethylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,3-Dichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,3-Dichloropropane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	1,4-Dichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	2,2-Dichloropropane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	2-Butanone	ug/l			50U	50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	2-Chloroethyl vinyl ether	ug/l			10U	10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	2-Chlorotoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	2-Hexanone	ug/l			10U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	4-Chlorotoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	4-Isopropyltoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	4-Methyl-2-pentanone	ug/l			10U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Acetone	ug/l				5.3J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Acrylonitrile	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Benzene	ug/l	0.4U	0.2U	0.5U	1U	2U	0.5U	0.5U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Bromobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Bromochloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Bromodichloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Bromoform	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Bromomethane	ug/l			2U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	BTEX (total)	ug/l	0.8U														
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Carbon disulfide	ug/l			10U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Carbon tetrachloride	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Chlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Chloroethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Chloroform	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Chloromethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	cis-1,2-Dichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	cis-1,3-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Dibromochloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Dibromomethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Dichlorodifluoromethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Ethylbenzene	ug/l	0.4U	0.2U	1U	1U	2U	0.5U	0.5U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Hexachlorobutadiene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Iodomethane	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Isopropylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	m,p-Xylene	ug/l	0.8U	0.4U	2U	2U	2U			2.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Methyl Tert-Butyl Ether	ug/l				2U	2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Methylene chloride	ug/l			5U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Naphthalene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	n-Butylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	n-Propylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	o-Xylene	ug/l	0.4U	0.2U	1U	2U	2U			1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	sec-Butylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Styrene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	tert-Butylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Tetrachloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Toluene	ug/l	0.6U	0.3U	1U	1U	2U	0.5U	0.5U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	trans-1,2-Dichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	trans-1,3-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	trans-1,4-Dichloro-2-butene	ug/l				10U											

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Trichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Trichlorofluoromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Vinyl acetate	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Vinyl chloride	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Xylenes	ug/l				3U		1U	1U	3.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-811	VOA	Xylenes (total)	ug/l	0.8U							3.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	1,2,4-Trichlorobenzene	ug/l			28U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	1,2-Dichlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	1,3-Dichlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	1,4-Dichlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2,2-oxybis(1-Chloropropane)	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2,4,5-Trichlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2,4,6-Trichlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2,4-Dichlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2,4-Dimethylphenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2,4-Dinitrophenol	ug/l			200U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2,4-Dinitrotoluene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2,6-Dinitrotoluene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2-Chloronaphthalene	ug/l			28U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2-Chlorophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2-Methylnaphthalene	ug/l			28U	0.1J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2-Methylphenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2-Nitroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	2-Nitrophenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	3,3-Dichlorobenzidine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	3-Nitroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	4,6-Dinitro-2-methylphenol	ug/l			200U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	4-Bromophenyl-phenylether	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	4-Chloro-3-methylphenol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	4-Chloroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	4-Chlorophenyl-phenylether	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	4-Nitroaniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	4-Nitrophenol	ug/l			160U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Acenaphthene	ug/l			28U	0.063											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Acenaphthylene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Aniline	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Anthracene	ug/l			22U	0.31U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Azobenzene	ug/l			220U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Benzo(a)anthracene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Benzo(a)pyrene	ug/l			22U	0.073											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Benzo(b)fluoranthene	ug/l			22U	0.083											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Benzo(g,h,i)perylene	ug/l			28U	0.094U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Benzo(k)fluoranthene	ug/l			28U	0.1U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Benzoic acid	ug/l			56U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Benzyl alcohol	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	bis(2-Chloroethoxy)methane	ug/l			28U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	bis(2-Chloroethyl)ether	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	bis(2-Ethylhexyl)phthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Butylbenzylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Chrysene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Cresols	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Dibenz(a,h)anthracene	ug/l			28U	0.16U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Dibenzofuran	ug/l			22U												

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Diethylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Dimethylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Di-n-butylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Di-n-octylphthalate	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Fluoranthene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Fluorene	ug/l			22U	0.25											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Hexachlorobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Hexachlorobutadiene	ug/l			34U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Hexachlorocyclopentadiene	ug/l			34U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Hexachloroethane	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			22U	0.21U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Isophorone	ug/l			28U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Naphthalene	ug/l			22U	0.25U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Nitrobenzene	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	N-Nitrosodimethylamine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	N-Nitrosodinpropylamine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	N-Nitrosodiphenylamine	ug/l			22U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Pentachlorophenol	ug/l			160U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Phenanthrene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Phenol	ug/l			11U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	SVOA	Pyrene	ug/l			22U	0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	C10-C24 Aliphatics	ug/l	100U	78UJ													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	C10-C24 Aromatics	ug/l	100U	78UJ													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	C25-C36 Aliphatics	ug/l	100U	58UJ													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	C25-C36 Aromatics	ug/l	100U	78UJ													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	C6-C9 Aliphatics	ug/l	20UJ	20U													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	TPH-Diesel	ug/l	170	160UJ	543U	120J	160	92J	111J	250							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	TPH-Gasoline	ug/l	20U	20U	90U	10J	18U	80U	80U	25U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	TPH	TPH-Heavy Fraction/Oil	ug/l			1090U	200J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,1,1-Trichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,1,2-Trichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,1,2-Trichlorotrifluoroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,1-Dichloroethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,1-Dichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,1-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,2,3-Trichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,2,3-Trichloropropane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,2,4-Trichlorobenzene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,2,4-Trimethylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U	10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,2-Dibromoethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,2-Dichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,2-Dichloroethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,2-Dichloropropane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,3,5-Trimethylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,3-Dichlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,3-Dichloropropane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	1,4-Dichlorobenzene	ug/l			1U	2U											

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	2,2-Dichloropropane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	2-Butanone	ug/l			50U	50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	2-Chloroethyl vinyl ether	ug/l			10U	10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	2-Chlorotoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	2-Hexanone	ug/l			10U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	4-Chlorotoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	4-Isopropyltoluene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	4-Methyl-2-pentanone	ug/l			10U	20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Acetone	ug/l				7.5J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Acrylonitrile	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Benzene	ug/l	0.4U	0.2U	0.5U	1U	2U	0.5U	0.5U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Bromobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Bromochloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Bromodichloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Bromoform	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Bromomethane	ug/l			2U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	BTEX (total)	ug/l	0.4	0.2													
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Carbon disulfide	ug/l			10U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Carbon tetrachloride	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Chlorobenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Chloroethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Chloroform	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Chloromethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	cis-1,2-Dichloroethene	ug/l			1U	0.79J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	cis-1,3-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Dibromochloromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Dibromomethane	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Dichlorodifluoromethane	ug/l			1U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Ethylbenzene	ug/l	0.4U	0.2U	0.5U	1U	2U	0.5U	0.5U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Hexachlorobutadiene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Iodomethane	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Isopropylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	m,p-Xylene	ug/l	0.8U	0.4U	2U	2U	2U			2.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Methyl Tert-Butyl Ether	ug/l				2U	2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Methylene chloride	ug/l			5U	5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Naphthalene	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	n-Butylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	n-Propylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	o-Xylene	ug/l	0.4U	0.2U	1U	2U	2U			1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	sec-Butylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Styrene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	tert-Butylbenzene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Tetrachloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Toluene	ug/l	0.6U	0.3U	0.5U	1U	2U	0.5U	0.5U	1.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	trans-1,2-Dichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	trans-1,3-Dichloropropene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	trans-1,4-Dichloro-2-butene	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Trichloroethene	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Trichlorofluoromethane	ug/l			1U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Vinyl acetate	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Vinyl chloride	ug/l			2U	2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Xylenes	ug/l			1U	3U		1U	1U	3.0U							
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	05-815	VOA	Xylenes (total)	ug/l	0.4	0.2						3.0U							

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-2	TPH	TPH-Diesel	ug/l			160000							2100Y	1500Y	2900YJ			
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-2	TPH	TPH-Gasoline	ug/l			163J												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-2	TPH	TPH-Heavy Fraction/Oil	ug/l			75800U												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-2	VOA	Benzene	ug/l			1.05												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-2	VOA	Ethylbenzene	ug/l			10.7												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-2	VOA	Toluene	ug/l			0.5U												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-2	VOA	Xylenes	ug/l			5.31												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-3	TPH	TPH-Diesel	ug/l			148000						1300Y	3500Y	760Y	810Y			
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-3	TPH	TPH-Gasoline	ug/l			137J												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-3	TPH	TPH-Heavy Fraction/Oil	ug/l			15800U												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-3	VOA	Benzene	ug/l			0.2U												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-3	VOA	Ethylbenzene	ug/l			0.776												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-3	VOA	Toluene	ug/l			0.5U												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	HC-3	VOA	Xylenes	ug/l			1.16												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	PP-05	TPH	TPH-Diesel	ug/l			40600								8500Y	8500YJ		5200Y	
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	PP-05	TPH	TPH-Gasoline	ug/l			501J												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	PP-05	VOA	Benzene	ug/l			8.73												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	PP-05	VOA	Ethylbenzene	ug/l			44.2												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	PP-05	VOA	Toluene	ug/l			1.25U												
SWMU 17, Power Plant No. 3	(AND SWMU 36-40 AND 63)	WLM	PP-05	VOA	Xylenes	ug/l			43.1												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Acenaphthene	ug/l			0.245J												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Acenaphthylene	ug/l			0.111U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Anthracene	ug/l			0.0667J												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Benzo(a)anthracene	ug/l			0.111U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Benzo(a)pyrene	ug/l			0.111U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Benzo(b)fluoranthene	ug/l			0.111U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Benzo(g,h,i)perylene	ug/l			0.111U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Benzo(k)fluoranthene	ug/l			0.111U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	bis(2-Ethylhexyl)phthalate	ug/l					5.2U	0.328J	0.5U								
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Chrysene	ug/l			0.111U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Dibenz(a,h)anthracene	ug/l			0.111U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Fluoranthene	ug/l			0.154												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Fluorene	ug/l			1.18J												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			0.111U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Naphthalene	ug/l			0.111U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Phenanthrene	ug/l			0.2J												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	SVOA	Pyrene	ug/l			0.173												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	TPH	TPH-Diesel	ug/l			15100		1200	1590	1040J	1600	1200Y	1100Y		1300Y		1000Y	
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	TPH	TPH-Gasoline	ug/l			57.4												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	TPH	TPH-Heavy Fraction/Oil	ug/l			750U		340	240J									
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,1,1-Trichloroethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,1,2,2-Tetrachloroethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,1,2-Trichloroethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,1-Dichloroethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,1-Dichloroethene	ug/l			1U		2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,1-Dichloropropene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,2,3-Trichlorobenzene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,2,3-Trichloropropane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,2,4-Trichlorobenzene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,2,4-Trimethylbenzene	ug/l			1.18												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,2-Dibromo-3-chloropropane	ug/l			5U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,2-Dibromoethane	ug/l			1U												

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,2-Dichlorobenzene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,2-Dichloroethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,2-Dichloropropane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,3,5-Trimethylbenzene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,3-Dichlorobenzene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,3-Dichloropropane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	1,4-Dichlorobenzene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	2,2-Dichloropropane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	2-Butanone	ug/l			10U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	2-Chlorotoluene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	2-Hexanone	ug/l			10U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	4-Chlorotoluene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	4-Isopropyltoluene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	4-Methyl-2-pentanone	ug/l			10U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Acetone	ug/l			25U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Benzene	ug/l			1.01												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Bromobenzene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Bromochloromethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Bromodichloromethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Bromoform	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Bromomethane	ug/l			2U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Carbon disulfide	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Carbon tetrachloride	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Chlorobenzene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Chloroethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Chloroform	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Chloromethane	ug/l			5U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	cis-1,2-Dichloroethene	ug/l			1U		2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	cis-1,3-Dichloropropene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Dibromochloromethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Dibromomethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Dichlorodifluoromethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Ethylbenzene	ug/l			2.06												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Hexachlorobutadiene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Isopropylbenzene	ug/l			1J												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	m,p-Xylene	ug/l			2.56												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Methylene chloride	ug/l			5U		5U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Naphthalene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	n-Butylbenzene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	n-Propylbenzene	ug/l			0.604J												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	o-Xylene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	sec-Butylbenzene	ug/l			1.48												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Styrene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	tert-Butylbenzene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Tetrachloroethene	ug/l			1U		2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Toluene	ug/l			0.5U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	trans-1,2-Dichloroethene	ug/l			1U		2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	trans-1,3-Dichloropropene	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Trichloroethene	ug/l			1U		2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Trichlorofluoromethane	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Vinyl chloride	ug/l			1U		2UJ										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-1 (03-004)	VOA	Xylenes	ug/l			1U												
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-2 (03-002)	TPH	TPH-Diesel	ug/l									77Y	270Y		220Y			

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-5 (03-005)	TPH	TPH-Diesel	ug/l									1900Y	1900Y	1900Y	1800Y			
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	2-Methylnaphthalene	ug/l				0.073J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Acenaphthene	ug/l				0.29											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Acenaphthylene	ug/l				0.094											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Anthracene	ug/l				0.31U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Benzo(a)anthracene	ug/l				0.073											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Benzo(a)pyrene	ug/l				0.1											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Benzo(b)fluoranthene	ug/l				0.13											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Benzo(g,h,i)perylene	ug/l				0.13											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Benzo(k)fluoranthene	ug/l				0.1											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	bis(2-Ethylhexyl)phthalate	ug/l					5.3U	0.385J	0.399J								
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Chrysene	ug/l				0.052											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Dibenz(a,h)anthracene	ug/l				0.16U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Fluoranthene	ug/l				0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Fluorene	ug/l				0.65											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Indeno(1,2,3-cd)pyrene	ug/l				0.21U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Naphthalene	ug/l				1.4											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Phenanthrene	ug/l				0.083											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	SVOA	Pyrene	ug/l				0.052U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	TPH	TPH-Diesel	ug/l					12000	3850	4740J		8800Y	5500Y	4300Y	5000Y			
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	TPH	TPH-Heavy Fraction/Oil	ug/l					970	500U									
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,1,1,2-Tetrachloroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,1,1-Trichloroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,1,2,2-Tetrachloroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,1,2-Trichloroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,1,2-Trichlorotrifluoroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,1-Dichloroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,1-Dichloroethene	ug/l				2U	2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,1-Dichloropropene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,2,3-Trichlorobenzene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,2,3-Trichloropropane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,2,4-Trichlorobenzene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,2,4-Trimethylbenzene	ug/l				0.49J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,2-Dibromo-3-chloropropane	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,2-Dibromoethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,2-Dichlorobenzene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,2-Dichloroethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,2-Dichloropropane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,3,5-Trimethylbenzene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,3-Dichlorobenzene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,3-Dichloropropane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	1,4-Dichlorobenzene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	2-Butanone	ug/l				50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	2-Chloroethyl vinyl ether	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	2-Chlorotoluene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	2-Hexanone	ug/l				20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	4-Chlorotoluene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	4-Isopropyltoluene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	4-Methyl-2-pentanone	ug/l				20U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Acetone	ug/l				50U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Acrylonitrile	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Benzene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Bromobenzene	ug/l				2U											

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SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Bromochloromethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Bromodichloromethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Bromoform	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Bromomethane	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Carbon disulfide	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Carbon tetrachloride	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Chlorobenzene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Chloroethane	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Chloroform	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Chloromethane	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	cis-1,2-Dichloroethene	ug/l				2U	2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	cis-1,3-Dichloropropene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Dibromochloromethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Dibromomethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Dichlorodifluoromethane	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Ethylbenzene	ug/l				2.7											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Hexachlorobutadiene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Iodomethane	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Isopropylbenzene	ug/l				1.4J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	m,p-Xylene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Methyl Tert-Butyl Ether	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Methylene chloride	ug/l				5U	5U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Naphthalene	ug/l				0.92J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	n-Butylbenzene	ug/l				2.5											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	n-Propylbenzene	ug/l				2.2											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	o-Xylene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	sec-Butylbenzene	ug/l				1.3J											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Styrene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	tert-Butylbenzene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Tetrachloroethene	ug/l				2U	2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Toluene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	trans-1,2-Dichloroethene	ug/l				2U	2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	trans-1,3-Dichloropropene	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	trans-1,4-Dichloro-2-butene	ug/l				10U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Trichloroethene	ug/l				2U	2U										
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Trichlorofluoromethane	ug/l				2U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Vinyl acetate	ug/l				5U											
SWMU 17, Power Plant No. 3	WEST RUNWAY AREA	WLM	R-6 (03-006)	VOA	Vinyl chloride	ug/l				2U	2UJ										
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-5	TPH	TPH-Diesel	ug/l			2930												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-5	TPH	TPH-Gasoline	ug/l			50U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-5	TPH	TPH-Heavy Fraction/Oil	ug/l			750U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-5	VOA	Benzene	ug/l			0.413												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-5	VOA	Ethylbenzene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-5	VOA	Toluene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-5	VOA	Xylenes	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-7	TPH	TPH-Diesel	ug/l			296												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-7	TPH	TPH-Gasoline	ug/l			50U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-7	TPH	TPH-Heavy Fraction/Oil	ug/l			750U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-7	VOA	Benzene	ug/l			0.2U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-7	VOA	Ethylbenzene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-7	VOA	Toluene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WL	MW-7	VOA	Xylenes	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP01	TPH	TPH-Diesel	ug/l			159												

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SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP01	TPH	TPH-Gasoline	ug/l			50U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP01	VOA	Benzene	ug/l			0.2U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP01	VOA	Ethylbenzene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP01	VOA	Toluene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP01	VOA	Xylenes	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-02	TPH	TPH-Diesel	ug/l			271												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-02	TPH	TPH-Gasoline	ug/l			50U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-02	VOA	Benzene	ug/l			0.2U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-02	VOA	Ethylbenzene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-02	VOA	Toluene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-02	VOA	Xylenes	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-03	TPH	TPH-Diesel	ug/l			248												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-03	TPH	TPH-Gasoline	ug/l			50U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-03	VOA	Benzene	ug/l			0.2U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-03	VOA	Ethylbenzene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-03	VOA	Toluene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-03	VOA	Xylenes	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-04	TPH	TPH-Diesel	ug/l			180												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-04	TPH	TPH-Gasoline	ug/l			50U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-04	VOA	Benzene	ug/l			0.2U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-04	VOA	Ethylbenzene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-04	VOA	Toluene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-04	VOA	Xylenes	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Acenaphthene	ug/l			0.152												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Acenaphthylene	ug/l			0.133												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Anthracene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Benzo(a)anthracene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Benzo(a)pyrene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Benzo(b)fluoranthene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Benzo(g,h,i)perylene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Benzo(k)fluoranthene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Chrysene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Dibenz(a,h)anthracene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Fluoranthene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Fluorene	ug/l			0.72												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Naphthalene	ug/l			0.474												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Phenanthrene	ug/l			0.303												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	SVOA	Pyrene	ug/l			0.1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	TPH	TPH-Diesel	ug/l			912												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	TPH	TPH-Gasoline	ug/l			50U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,1,1-Trichloroethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,1,2,2-Tetrachloroethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,1,2-Trichloroethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,1-Dichloroethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,1-Dichloroethene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,1-Dichloropropene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,2,3-Trichlorobenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,2,3-Trichloropropane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,2,4-Trichlorobenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,2,4-Trimethylbenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,2-Dibromo-3-chloropropane	ug/l			5U												

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SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,2-Dibromoethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,2-Dichlorobenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,2-Dichloroethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,2-Dichloropropane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,3,5-Trimethylbenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,3-Dichlorobenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,3-Dichloropropane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	1,4-Dichlorobenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	2,2-Dichloropropane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	2-Butanone	ug/l			10U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	2-Chlorotoluene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	2-Hexanone	ug/l			10U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	4-Chlorotoluene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	4-Isopropyltoluene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	4-Methyl-2-pentanone	ug/l			10U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Acetone	ug/l			25U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Benzene	ug/l			0.2U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Bromobenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Bromochloromethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Bromodichloromethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Bromoform	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Bromomethane	ug/l			2U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Carbon disulfide	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Carbon tetrachloride	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Chlorobenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Chloroethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Chloroform	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Chloromethane	ug/l			5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	cis-1,2-Dichloroethene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	cis-1,3-Dichloropropene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Dibromochloromethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Dibromomethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Dichlorodifluoromethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Ethylbenzene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Hexachlorobutadiene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Isopropylbenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	m,p-Xylene	ug/l			2U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Methylene chloride	ug/l			5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Naphthalene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	n-Butylbenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	n-Propylbenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	o-Xylene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	sec-Butylbenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Styrene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	tert-Butylbenzene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Tetrachloroethene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Toluene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	trans-1,2-Dichloroethene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	trans-1,3-Dichloropropene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Trichloroethene	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Trichlorofluoromethane	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Vinyl chloride	ug/l			1U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	PP-06	VOA	Xylenes	ug/l			1U												

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	MW-17-7 (MW-50)	TPH	TPH-Diesel	ug/l			621												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	MW-17-7 (MW-50)	TPH	TPH-Gasoline	ug/l			50U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	MW-17-7 (MW-50)	VOA	Benzene	ug/l			0.2U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	MW-17-7 (MW-50)	VOA	Ethylbenzene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	MW-17-7 (MW-50)	VOA	Toluene	ug/l			0.5U												
SWMU17- POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	(AND SWMU 36-40 AND 63)	WLM	MW-17-7 (MW-50)	VOA	Xylenes	ug/l			1U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Aluminum	ug/l			2.5U	5.25											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Antimony	ug/l			0.5U	0.853	0.712										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Arsenic	ug/l			2U	0.402											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Barium	ug/l			1U	0.733											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Beryllium	ug/l			0.5U	0.15U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Cadmium	ug/l			2U	0.2U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Calcium	ug/l			41700	31800											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Chromium	ug/l			1U	0.173											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Cobalt	ug/l			0.4U	0.5U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Copper	ug/l			3U	1.05											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Iron	ug/l			1000U	50U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Lead	ug/l			0.3U	0.1U								0.030U			
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Magnesium	ug/l			8720	5240											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Manganese	ug/l			18.4	9.66											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Mercury	ug/l			0.2U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Nickel	ug/l			1U	1.52											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Potassium	ug/l			2290	2080											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Selenium	ug/l			2.5U	0.5U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Silver	ug/l			1U	0.127											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Sodium	ug/l				17200											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Thallium	ug/l			0.578	0.05U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Vanadium	ug/l			10U	5U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	DIN	Zinc	ug/l			10U	10.6											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	1,2,4-Trichlorobenzene	ug/l			30U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	1,2-Dichlorobenzene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	1,3-Dichlorobenzene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	1,4-Dichlorobenzene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2,2-oxybis(1-Chloropropane)	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2,4,5-Trichlorophenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2,4,6-Trichlorophenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2,4-Dichlorophenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2,4-Dimethylphenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2,4-Dinitrophenol	ug/l			220U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2,4-Dinitrotoluene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2,6-Dinitrotoluene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2-Chloronaphthalene	ug/l			30U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2-Chlorophenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2-Methylnaphthalene	ug/l			30U	0.051U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2-Methylphenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2-Nitroaniline	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	2-Nitrophenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	3,3-Dichlorobenzidine	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	3-Nitroaniline	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	4,6-Dinitro-2-methylphenol	ug/l			220U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	4-Bromophenyl-phenylether	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	4-Chloro-3-methylphenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	4-Chloroaniline	ug/l			24U												

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SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	4-Chlorophenyl-phenylether	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	4-Nitroaniline	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	4-Nitrophenol	ug/l			170U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Acenaphthene	ug/l			30U	0.051U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Acenaphthylene	ug/l			24U	0.051U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Aniline	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Anthracene	ug/l			24U	0.306U	0.31U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Azobenzene	ug/l			240U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Benzo(a)anthracene	ug/l			24U	0.051U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Benzo(a)pyrene	ug/l			24U	0.0643U	0.064U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Benzo(b)fluoranthene	ug/l			24U	0.051U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Benzo(g,h,i)perylene	ug/l			30U	0.0918U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Benzo(k)fluoranthene	ug/l			30U	0.102U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Benzoic acid	ug/l			61U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Benzyl alcohol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	bis(2-Chloroethoxy)methane	ug/l			30U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	bis(2-Chloroethyl)ether	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	bis(2-Ethylhexyl)phthalate	ug/l			24U		2.6U	0.5U									
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Butylbenzylphthalate	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Chrysene	ug/l			24U	0.051U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Cresols	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Dibenz(a,h)anthracene	ug/l			30U	0.153U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Dibenzofuran	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Diethylphthalate	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Dimethylphthalate	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Di-n-butylphthalate	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Di-n-octylphthalate	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Fluoranthene	ug/l			24U	0.051U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Fluorene	ug/l			24U	0.122U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Hexachlorobenzene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Hexachlorobutadiene	ug/l			37U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Hexachlorocyclopentadiene	ug/l			37U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Hexachloroethane	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			24U	0.204U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Isophorone	ug/l			30U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Naphthalene	ug/l			24U	0.245U	0.24U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Nitrobenzene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	N-Nitrosodimethylamine	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	N-Nitrosodinpropylamine	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	N-Nitrosodiphenylamine	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Pentachlorophenol	ug/l			170U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Phenanthrene	ug/l			24U	0.051U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Phenol	ug/l			12U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	SVOA	Pyrene	ug/l			24U	0.051U	0.051U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Aluminum	ug/l			200U	214											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Antimony	ug/l			1U	0.736											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Arsenic	ug/l			5U	1U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Barium	ug/l			3U	1.39											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Beryllium	ug/l			1U	0.5U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Cadmium	ug/l			2U	0.2U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Calcium	ug/l			41000	25300											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Chromium	ug/l			6U	0.24											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Cobalt	ug/l			0.8U	0.135											

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Copper	ug/l			6U	1.12											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Iron	ug/l			1000U	256											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Lead	ug/l			2U	0.15U								0.030U			
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Magnesium	ug/l			8250	5320											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Manganese	ug/l			30.7	31.5											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Mercury	ug/l			0.2U	0.2U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Nickel	ug/l			2U	1.13											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Potassium	ug/l			2230	2000											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Selenium	ug/l			5U	0.5U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Silver	ug/l			2U	0.35U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Sodium	ug/l				17100											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Thallium	ug/l			1U	0.25U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Vanadium	ug/l			20U	1.33											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TIN	Zinc	ug/l			25U	8.71											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TPH	TPH-Diesel	ug/l			25U	8.71								51UJ			
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	TPH	TPH-Gasoline	ug/l			25U	8.71								25J			
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,1,1-Trichloroethane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,1,2-Trichloroethane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,1,2-Trichlorotrifluoroethane	ug/l				2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,1-Dichloroethane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,1-Dichloroethene	ug/l			1U	2U	4U	1U	1U	1.0U	0.50U	0.50U	0.50U	0.50U	0.50U		0.50U
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,1-Dichloropropene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,2,3-Trichlorobenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,2,3-Trichloropropane	ug/l			2U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,2,4-Trichlorobenzene	ug/l			2U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,2,4-Trimethylbenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U	10U	20U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,2-Dibromoethane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,2-Dichlorobenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,2-Dichloroethane	ug/l			2U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,2-Dichloropropane	ug/l			2U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,3,5-Trimethylbenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,3-Dichlorobenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,3-Dichloropropane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	1,4-Dichlorobenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	2,2-Dichloropropane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	2-Butanone	ug/l			50U	50U	100U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	2-Chloroethyl vinyl ether	ug/l			10U	10U	20U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	2-Chlorotoluene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	2-Hexanone	ug/l			10U	20U	40U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	4-Chlorotoluene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	4-Isopropyltoluene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	4-Methyl-2-pentanone	ug/l			10U	20U	40U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Acetone	ug/l				50U	7.1J										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Acrylonitrile	ug/l				10U	20U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Benzene	ug/l			0.5U	2U	4U					0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Bromobenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Bromochloromethane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Bromodichloromethane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Bromoform	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Bromomethane	ug/l			2U	5U	10U										

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SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Carbon disulfide	ug/l			10U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Carbon tetrachloride	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Chlorobenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Chloroethane	ug/l			1U	5U	10U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Chloroform	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Chloromethane	ug/l			1U	5U	10U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	cis-1,2-Dichloroethene	ug/l			1U	2U	4U	1U	1U	1.0U	0.50U	0.50U	0.50U	0.50U	0.50U		0.50U
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	cis-1,3-Dichloropropene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Dibromochloromethane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Dibromomethane	ug/l			2U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Dichlorodifluoromethane	ug/l			1U	5U	10U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Ethylbenzene	ug/l			1U	2U	4U					0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Hexachlorobutadiene	ug/l			2U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Iodomethane	ug/l				5U	10U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Isopropylbenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	m,p-Xylene	ug/l			2U	2U	4U					0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Methyl Tert-Butyl Ether	ug/l				2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Methylene chloride	ug/l			5U	5U	10U	5U	2U								
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Naphthalene	ug/l			2U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	n-Butylbenzene	ug/l			1.02	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	n-Propylbenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	o-Xylene	ug/l			1U	2U	4U					0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	sec-Butylbenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Styrene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	tert-Butylbenzene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Tetrachloroethene	ug/l			180	130	170	112	90.3	110	71D	61	57	49	39		38
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Toluene	ug/l			1U	2U	4U					0.53 U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	trans-1,2-Dichloroethene	ug/l			1U	2U	4U	1U	1U	1.0U	0.50U	0.50U	0.50U	0.50U	0.50U		0.50U
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	trans-1,3-Dichloropropene	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	trans-1,4-Dichloro-2-butene	ug/l				10U	20U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Trichloroethene	ug/l			1U	2U	4U	0.3J	1U	1.0U	0.27J	0.32J	0.17J	0.22J	0.17J		0.13J
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Trichlorofluoromethane	ug/l			1U	2U	4U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Vinyl acetate	ug/l				5U	10U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-145	VOA	Vinyl chloride	ug/l			2U	2U	4UJ	1U	1U	1.0U	0.50U	0.50U	0.50U	0.50U	0.50U		0.50U
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Aluminum	ug/l			54	21.6											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Antimony	ug/l			0.5U	0.1U	0.235										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Arsenic	ug/l			4.64	3.04											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Barium	ug/l			23.4	125											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Beryllium	ug/l			0.5U	0.15U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Cadmium	ug/l			2U	0.2U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Calcium	ug/l			26000	26700											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Chromium	ug/l			8.46	2.33											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Cobalt	ug/l			0.4U	0.5U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Copper	ug/l			3U	0.723											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Iron	ug/l			71300	26800											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Lead	ug/l			0.3U	0.108							0.030U	0.032			
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Magnesium	ug/l			28100	26300											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Manganese	ug/l			3230	2170											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Mercury	ug/l			0.2U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Nickel	ug/l			1U	1.24											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Potassium	ug/l			7150	5650											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Selenium	ug/l			8.24	1.36											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Silver	ug/l			1U	0.1U											

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SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Sodium	ug/l				60100											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Thallium	ug/l			0.5U	0.05U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Vanadium	ug/l			10U	5U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	DIN	Zinc	ug/l			10U	76.4											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	1,2,4-Trichlorobenzene	ug/l			30U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	1,2-Dichlorobenzene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	1,3-Dichlorobenzene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	1,4-Dichlorobenzene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2,2-oxybis(1-Chloropropane)	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2,4,5-Trichlorophenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2,4,6-Trichlorophenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2,4-Dichlorophenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2,4-Dimethylphenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2,4-Dinitrophenol	ug/l			220U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2,4-Dinitrotoluene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2,6-Dinitrotoluene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2-Chloronaphthalene	ug/l			30U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2-Chlorophenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2-Methylnaphthalene	ug/l			30U	0.051U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2-Methylphenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2-Nitroaniline	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	2-Nitrophenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	3,3-Dichlorobenzidine	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	3-Nitroaniline	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	4,6-Dinitro-2-methylphenol	ug/l			220U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	4-Bromophenyl-phenylether	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	4-Chloro-3-methylphenol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	4-Chloroaniline	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	4-Chlorophenyl-phenylether	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	4-Nitroaniline	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	4-Nitrophenol	ug/l			170U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Acenaphthene	ug/l			30U	0.14	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Acenaphthylene	ug/l			24U	0.051U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Aniline	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Anthracene	ug/l			24U	0.31U	0.32U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Azobenzene	ug/l			240U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Benzo(a)anthracene	ug/l			24U	0.051U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Benzo(a)pyrene	ug/l			24U	0.064U	0.066U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Benzo(b)fluoranthene	ug/l			24U	0.051U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Benzo(g,h,i)perylene	ug/l			30U	0.092U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Benzo(k)fluoranthene	ug/l			30U	0.1U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Benzoic acid	ug/l			61U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Benzyl alcohol	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	bis(2-Chloroethoxy)methane	ug/l			30U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	bis(2-Chloroethyl)ether	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	bis(2-Ethylhexyl)phthalate	ug/l			24U			0.5U	0.603J								
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Butylbenzylphthalate	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Chrysene	ug/l			24U	0.051U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Cresols	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Dibenz(a,h)anthracene	ug/l			30U	0.15U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Dibenzofuran	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Diethylphthalate	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Dimethylphthalate	ug/l			24U												

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SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Di-n-butylphthalate	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Di-n-octylphthalate	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Fluoranthene	ug/l			24U	0.061	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Fluorene	ug/l			24U	0.12U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Hexachlorobenzene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Hexachlorobutadiene	ug/l			37U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Hexachlorocyclopentadiene	ug/l			37U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Hexachloroethane	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			24U	0.2U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Isophorone	ug/l			30U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Naphthalene	ug/l			24U	0.24U	0.25U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Nitrobenzene	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	N-Nitrosodimethylamine	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	N-Nitrosodinpropylamine	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	N-Nitrosodiphenylamine	ug/l			24U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Pentachlorophenol	ug/l			170U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Phenanthrene	ug/l			24U	0.11	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Phenol	ug/l			12U												
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	SVOA	Pyrene	ug/l			24U	0.051U	0.053U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Aluminum	ug/l			200U	98.3											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Antimony	ug/l			1U	0.5U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Arsenic	ug/l			5.9	3.51											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Barium	ug/l			22.9	17.8											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Beryllium	ug/l			1U	0.5U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Cadmium	ug/l			2U	0.2U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Calcium	ug/l			25900	26900											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Chromium	ug/l			6.88	0.317											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Cobalt	ug/l			0.8U	0.263											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Copper	ug/l			6U	1.2											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Iron	ug/l			71300	27300											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Lead	ug/l			2U	0.243							0.055	0.137			
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Magnesium	ug/l			27900	24600											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Manganese	ug/l			3330	2030											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Mercury	ug/l			0.2U	0.2U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Nickel	ug/l			2U	1.11											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Potassium	ug/l			7190	5500											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Selenium	ug/l			11.8	1.21											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Silver	ug/l			2U	0.35U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Sodium	ug/l				61000											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Thallium	ug/l			1U	0.25U											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Vanadium	ug/l			20U	3.18											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TIN	Zinc	ug/l			25U	32.9											
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TPH	TPH-Gasoline	ug/l											100U	15J			
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	TPH	TPH-Diesel	ug/l											70U	120Y			
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,1,1-Trichloroethane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,1,2,2-Tetrachloroethane	ug/l			2U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,1,2-Trichloroethane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,1,2-Trichlorotrifluoroethane	ug/l				2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,1-Dichloroethane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,1-Dichloroethene	ug/l			1U	2U	2U	1U		1.0U		0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,1-Dichloropropene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,2,3-Trichlorobenzene	ug/l			1U	2U	2U										

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SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,2,3-Trichloropropane	ug/l			2U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,2,4-Trichlorobenzene	ug/l			2U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,2,4-Trimethylbenzene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,2-Dibromo-3-chloropropane	ug/l			2.5U	10U	10U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,2-Dibromoethane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,2-Dichlorobenzene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,2-Dichloroethane	ug/l			2U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,2-Dichloropropane	ug/l			2U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,3,5-Trimethylbenzene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,3-Dichlorobenzene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,3-Dichloropropane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	1,4-Dichlorobenzene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	2,2-Dichloropropane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	2-Butanone	ug/l			50U	50U	50U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	2-Chloroethyl vinyl ether	ug/l			10U	10U	10U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	2-Chlorotoluene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	2-Hexanone	ug/l			10U	20U	20U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	4-Chlorotoluene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	4-Isopropyltoluene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	4-Methyl-2-pentanone	ug/l			10U	20U	20U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Acetone	ug/l				690	3.4J										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Acrylonitrile	ug/l				10U	10U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Benzene	ug/l			0.5U	2U	2U					0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Bromobenzene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Bromochloromethane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Bromodichloromethane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Bromoform	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Bromomethane	ug/l			2U	5U	5U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Carbon disulfide	ug/l			10U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Carbon tetrachloride	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Chlorobenzene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Chloroethane	ug/l			1U	5U	5U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Chloroform	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Chloromethane	ug/l			1U	5U	5U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	cis-1,2-Dichloroethene	ug/l			8.9	1.2J	2U	0.19J		1.0U		0.18J					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	cis-1,3-Dichloropropene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Dibromochloromethane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Dibromomethane	ug/l			2U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Dichlorodifluoromethane	ug/l			1U	5U	5U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Ethylbenzene	ug/l			1U	2U	2U					0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Hexachlorobutadiene	ug/l			2U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Iodomethane	ug/l				5U	5U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Isopropylbenzene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	m,p-Xylene	ug/l			2U	2U	2U					0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Methyl Tert-Butyl Ether	ug/l				2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Methylene chloride	ug/l			5U	5U	0.54U	5U	2U								
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Naphthalene	ug/l			2U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	n-Butylbenzene	ug/l			1.02	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	n-Propylbenzene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	o-Xylene	ug/l			1U	2U	2U					0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	sec-Butylbenzene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Styrene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	tert-Butylbenzene	ug/l			1U	2U	2U										

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SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Tetrachloroethene	ug/l			1U	2U	0.79J	0.15J		1.0U		0.22J					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Toluene	ug/l			1U	2U	2U					0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	trans-1,2-Dichloroethene	ug/l			2.88	2U	2U	1U		1.0U		0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	trans-1,3-Dichloropropene	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	trans-1,4-Dichloro-2-butene	ug/l				10U	10U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Trichloroethene	ug/l			1U	2U	2U	1U	1U	1.0U		0.50U					
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Trichlorofluoromethane	ug/l			1U	2U	2U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Vinyl acetate	ug/l				5U	5U										
SWMU 55, Public Transportation Dept. Waste Storage Area	DEPT. WASTE STORAGE	WLM	55-146	VOA	Vinyl chloride	ug/l			2U	2U	2UJ	1U		1.0U		0.50U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-101	TPH	DRO - Aliphatic Fraction	ug/l				70J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-101	TPH	DRO - Aromatic Fraction	ug/l				30J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-101	TPH	TPH-Diesel	ug/l				1100			1090	980							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-101	TPH	TPH-Gasoline	ug/l							80U	25U							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-101	VOA	Benzene	ug/l							0.5U	1.0U							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-101	VOA	Ethylbenzene	ug/l							0.11J	1.0U							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-101	VOA	Toluene	ug/l							0.5U	1.0U							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-101	VOA	Xylenes	ug/l							1U	3.0U							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-101	VOA	m,p-Xylene	ug/l								2.0U							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-101	VOA	o-Xylene	ug/l								1.0U							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-105	TPH	TPH-Diesel	ug/l				9600						7800Y		6400Y	5900Y	7300YJ	
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-105	TPH	TPH-Gasoline	ug/l				130						60J					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-105	VOA	Benzene	ug/l										0.30J					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-105	VOA	Ethylbenzene	ug/l										0.28J					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-105	VOA	Toluene	ug/l										1.4U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-105	VOA	Xylenes	ug/l										0.47J					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-105	VOA	m,p-Xylene	ug/l										0.20J					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-105	VOA	o-Xylene	ug/l										0.27J					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-106	TPH	TPH-Diesel	ug/l				2600											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	TPH	DRO - Aliphatic Fraction	ug/l				25J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	TPH	DRO - Aromatic Fraction	ug/l				17J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	TPH	GRO - Aliphatic Fraction	ug/l				7.3J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	TPH	GRO - Aromatic Fraction	ug/l				230											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	TPH	TPH-Diesel	ug/l				9400			2080J	6800		2900Y		4300Y		1700YJ	
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	TPH	TPH-Gasoline	ug/l				230			80U	200		20J					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	VOA	Benzene	ug/l				2.4			0.5U	5.1		0.38J					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	VOA	Ethylbenzene	ug/l				9.5			0.79	14		0.72					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	VOA	Toluene	ug/l				1U			0.5U	0.97J		0.71U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	VOA	Xylenes	ug/l				40			1.07	61		1.13J					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	VOA	m,p-Xylene	ug/l								61		1.0					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-114	VOA	o-Xylene	ug/l								1.0U		0.13J					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-120	TPH	TPH-Diesel	ug/l				1300			1540	2100							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-120	TPH	TPH-Gasoline	ug/l				100			56J	120							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-120	VOA	Benzene	ug/l				1U			0.5U	1.0U							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-120	VOA	Ethylbenzene	ug/l				7.2			8.16	7.5							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-120	VOA	Toluene	ug/l				1U			0.2J	1.0U							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-120	VOA	Xylenes	ug/l				6.7			5.99	8.09J							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-120	VOA	m,p-Xylene	ug/l				6.7			5.99	7.5							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-120	VOA	o-Xylene	ug/l				6.7			5.99	0.59J							
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-121	TPH	TPH-Diesel	ug/l				19000			14300		28000Y		9500Y	1300YJ	6800Y		
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-121	TPH	TPH-Gasoline	ug/l				260			120		190H						
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-121	VOA	Benzene	ug/l				0.56J			0.47J		1.4						
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-121	VOA	Ethylbenzene	ug/l				8.4			6.68		6.1						
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-121	VOA	Toluene	ug/l				1U			0.25J		0.63						

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SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-121	VOA	Xylenes	ug/l				8.8			6.46		5.7J						
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-124	TPH	TPH-Diesel	ug/l				5600											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-124	TPH	TPH-Gasoline	ug/l				230											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RW	12-125	TPH	DRO - Aliphatic Fraction	ug/l				59J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RW	12-125	TPH	DRO - Aromatic Fraction	ug/l				130											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RW	12-125	TPH	GRO - Aliphatic Fraction	ug/l				33J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RW	12-125	TPH	GRO - Aromatic Fraction	ug/l				22											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RW	12-125	TPH	TPH-Diesel	ug/l				2800											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RW	12-125	TPH	TPH-Gasoline	ug/l				55											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RW	12-125	VOA	Benzene	ug/l				0.9J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RW	12-125	VOA	Ethylbenzene	ug/l				1.8											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RW	12-125	VOA	Toluene	ug/l				0.5J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RW	12-125	VOA	Xylenes	ug/l				2.1J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-201	TPH	DRO - Aliphatic Fraction	ug/l				67J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-201	TPH	DRO - Aromatic Fraction	ug/l				170											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-201	TPH	GRO - Aliphatic Fraction	ug/l				870											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-201	TPH	GRO - Aromatic Fraction	ug/l				450											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-201	TPH	TPH-Diesel	ug/l				920											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-201	TPH	TPH-Gasoline	ug/l				1300											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-201	VOA	Benzene	ug/l				2.4											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-201	VOA	Ethylbenzene	ug/l				50											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-201	VOA	Toluene	ug/l				10											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-201	VOA	Xylenes	ug/l				210											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-203	TPH	TPH-Diesel	ug/l						51900J						17000Y	15000Y	14000YJ	
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-203	TPH	TPH-Gasoline	ug/l						176									
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-203	VOA	Benzene	ug/l						1.33									
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-203	VOA	Ethylbenzene	ug/l						9.36									
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-203	VOA	Toluene	ug/l						0.2J									
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	GW	12-203	VOA	Xylenes	ug/l						10.1									
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	C10-C24 Aliphatics	ug/l	100U	130J													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	C10-C24 Aromatics	ug/l	120J	120J													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	C25-C36 Aliphatics	ug/l	120J	60UJ													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	C25-C36 Aromatics	ug/l	100U	80UJ													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	C6-C9 Aliphatics	ug/l	23	20U													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	TPH-Diesel	ug/l	220J	250J		160U	56J	250U	240U	61	73U	40J	92Y	27J			
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	TPH-Gasoline	ug/l	24	20U	90U	9.5J	11U	80U	80U	25U	100U	100U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	TPH	TPH-Heavy Fraction/Oil	ug/l				210J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U	2U	0.5U	0.5U	1.0U	0.50U	0.50U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	VOA	BTEX (total)	ug/l	0.43														
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U	2U	0.5U	0.5U	1.0U	0.50U	0.50U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U		2U			2.0U	0.50U	0.50U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	VOA	o-Xylene	ug/l	0.2U	0.2UJ	2U		2U			1.0U	0.50U	0.50U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	VOA	Toluene	ug/l	0.43	0.3U	2U	1U	2U	0.5U	0.5U	1.0U	0.50U	0.72U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	VOA	Xylenes	ug/l				3U		0.34J	1U	3.0U	1.0U	1.0U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-601	VOA	Xylenes (total)	ug/l	0.4U							3.0U	1.0U	1.0U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	C10-C24 Aliphatics	ug/l	100U	82UJ													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	C10-C24 Aromatics	ug/l	100U	82UJ													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	C25-C36 Aliphatics	ug/l	100U	61UJ													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	C25-C36 Aromatics	ug/l	100U	82UJ													

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SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	C6-C9 Aliphatics	ug/l	20U	20U													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	TPH-Diesel	ug/l	160UJ	160UJ		100J	81J	250U	240U	76		40J		50Z			
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	TPH-Gasoline	ug/l	20U	20U	90U	6.3J	13U	80U	80U	25U		100 U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	TPH	TPH-Heavy Fraction/Oil	ug/l				170J											
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U	2U	0.5U	0.5U	1.0U		0.50U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	VOA	BTEX (total)	ug/l	0.4U														
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U	2U	0.5U	0.5U	1.0U		0.50U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U		2U			2.0U		0.50U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	VOA	o-Xylene	ug/l	0.2U	0.2U	2U		2U			1.0U		0.50U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U	2U	0.5U	0.5U	1.0U		0.74U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	VOA	Xylenes	ug/l				3U		1U	1U	3.0U		1.0U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-604	VOA	Xylenes (total)	ug/l	0.4U							3.0U		1.0U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-611	TPH	TPH-Diesel	ug/l					4000	4950	2750J	4000	5000Y	3200Y	2500Y	3300Y	2800Y		
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-611	TPH	TPH-Gasoline	ug/l					690	616	591	710	730Y	750Y					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-611	VOA	Benzene	ug/l					25	24.6	25.2	28	18	16					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-611	VOA	Ethylbenzene	ug/l					23	17.9	21	25	18	13					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-611	VOA	m,p-Xylene	ug/l					130			220	160	130					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-611	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-611	VOA	o-Xylene	ug/l					1.19J			1.0U	1.5	1.2					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-611	VOA	Toluene	ug/l					2.3	1.7	1.99	3.0	1.7	2.2U					
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	WLM	12-611	VOA	Xylenes	ug/l						82.6	131	220	161.5	131.2					
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	2-Methylnaphthalene	ug/l										34D	42D	42D	51D	64D	84D
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Acenaphthene	ug/l										0.91	0.95	0.99	0.96	1.1	1.4
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Acenaphthylene	ug/l										0.37U	0.31U	0.31U	0.32U	0.38U	0.42U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Anthracene	ug/l										0.10	0.12	0.12	0.12	0.099	0.13
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Benzo(a)anthracene	ug/l										0.0073J	0.019U	0.0066J	0.0057J	0.0043J	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Benzo(a)pyrene	ug/l										0.020U	0.019U	0.020U	0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Benzo(b)fluoranthene	ug/l										0.020U	0.019U	0.020U	0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Benzo(g,h,i)perylene	ug/l										0.020U	0.019U	0.020U	0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Benzo(k)fluoranthene	ug/l										0.020U	0.019U	0.020U	0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Chrysene	ug/l										0.0054J	0.0039J	0.020U	0.020U	0.020U	0.0040J
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Dibenz(a,h)anthracene	ug/l										0.020U	0.019U	0.020U	0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Fluoranthene	ug/l										0.078	0.072	0.078	0.090	0.091	0.097
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Fluorene	ug/l										4.8	4.3	4.4	4.4	4.4	4.9
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Indeno(1,2,3-cd)pyrene	ug/l										0.020U	0.019U	0.020U	0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Naphthalene	ug/l										41D	27D	30D	34D	42D	66D
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Phenanthrene	ug/l										2.5	2.4	2.8	2.9	2.7	3.0
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Pyrene	ug/l										0.058	0.064	0.063	0.063	0.069	0.075
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	TPH	C10-C24 Aliphatics	ug/l	100U	82U													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	TPH	C10-C24 Aromatics	ug/l	614	660J													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	TPH	C25-C36 Aromatics	ug/l	100U	78U													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	TPH	C6-C9 Aliphatics	ug/l	730J	1100													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	TPH	C6-C9 Aromatics	ug/l	290J	370													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	TPH	TPH-Diesel	ug/l	620UJ	660J		1100	1800	2170	1500J	3000	1500Y	1100Y	1000Y	860Y	1200Y		
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	TPH	TPH-Gasoline	ug/l	1000J	1500		830	740										
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	TPH	TPH-Heavy Fraction/Oil	ug/l				170J											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	VOA	Benzene	ug/l	0.48J	1.1J			1.6J					1.6J	1.3	1.1	1.6	1.4J	2.0
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	VOA	BTEX (total)	ug/l	81													55.6J	120.8

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SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	VOA	Ethylbenzene	ug/l	18J	25			24					21D	26	26	32	22J	55
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	VOA	m,p-Xylene	ug/l	67	96			69					47D	58	46	52	28J	57
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	VOA	o-Xylene	ug/l	1.1J	1.5J			1.04J					0.95J	1.3	1.4	1.7	1.2J	2.9
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	VOA	Toluene	ug/l	2.2J	2.5J			1.8J					2.6J	1.7	2.3	2.3	3.0J	3.9
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	VOA	Xylenes (total)	ug/l	64									47.95DJ	59.3	47.4	53.7	29.2J	59.9
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	TPH	C10-C24 Aliphatics	ug/l	100U	82U													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	TPH	C10-C24 Aromatics	ug/l	110	82UJ													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	TPH	C25-C36 Aliphatics	ug/l	100U	60UJ													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	TPH	C25-C36 Aromatics	ug/l	100U	80U													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	TPH	C6-C9 Aliphatics	ug/l	190	230													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	TPH	C6-C9 Aromatics	ug/l	24	20U													
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	TPH	TPH-Diesel	ug/l	180	160UJ	532U	710	47J										
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	TPH	TPH-Gasoline	ug/l	210	240	204	160	160										
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	TPH	TPH-Heavy Fraction/Oil	ug/l			1060U	120J											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	VOA	Benzene	ug/l	8.1	6.8	13.1		19	10.5	7.82	15	4.8	16	9.9	8.1	7.4	4.7	3.8
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	VOA	BTEX (total)	ug/l	21.54														
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	VOA	Ethylbenzene	ug/l	1.7NJ	0.51J	2U		2U	0.5U	0.73	1.0U	0.50U	0.50U	0.10J				
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	VOA	m,p-Xylene	ug/l	2.2	1.2J	2U		2U			2.0U	0.50U	0.50U	0.42J				
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	VOA	o-Xylene	ug/l	0.64NJ	0.2U	2U		2U			1.0U	0.50U	0.50U	0.20J				
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	VOA	Toluene	ug/l	0.3U	0.3U	2.23		2U	0.5U	0.19J	1.0U	0.50U	0.50U	0.50U				
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	VOA	Xylenes	ug/l						1U	2.38	3.0U	1.0U	1.0U	0.62J				
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	MW E006,MW-006,AMW-006	VOA	Xylenes (total)	ug/l	2.84							3.0U	1.0U	1.0U	0.62J				
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	2-Methylnaphthalene	ug/l													0.035	0.012JX	0.036X
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Acenaphthene	ug/l													0.29	0.18	0.17
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Acenaphthylene	ug/l													0.080U	0.020U	0.042U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Anthracene	ug/l													0.020U	0.020U	0.019U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Benzo(a)anthracene	ug/l													0.020U	0.020U	0.019U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Benzo(a)pyrene	ug/l													0.020U	0.020U	0.019U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Benzo(b)fluoranthene	ug/l													0.020U	0.020U	0.019U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Benzo(g,h,i)perylene	ug/l													0.020U	0.020U	0.019U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Benzo(k)fluoranthene	ug/l													0.020U	0.020U	0.019U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Chrysene	ug/l													0.020U	0.020U	0.019U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Dibenz(a,h)anthracene	ug/l													0.020U	0.020U	0.019U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Fluoranthene	ug/l													0.023	0.018J	0.029
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Fluorene	ug/l													1.4	0.22	0.86
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Indeno(1,2,3-cd)pyrene	ug/l													0.020U	0.020U	0.019U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Naphthalene	ug/l													0.55X	0.25X	0.21X
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Phenanthrene	ug/l													0.12	0.020U	0.019U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Pyrene	ug/l													0.021	0.028	0.033
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	TPH	TPH-Diesel	ug/l													1100Y	1600Y	2400Y
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	TPH	TPH-Gasoline	ug/l															
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	Benzene	ug/l													4.6	10	7.2
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	BTEX (total)	ug/l													6.26J	10.86J	7.39J
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	Ethylbenzene	ug/l													0.29J	0.25J	0.080J
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	m,p-Xylene	ug/l													0.80	0.50	0.11J
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	o-Xylene	ug/l													0.29J	0.11J	0.50U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	Toluene	ug/l													0.28J	0.70U	0.50U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	Xylenes (total)	ug/l													1.09J	0.61J	0.11J
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	2-Methylnaphthalene	ug/l													21D	20D	8.2
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Acenaphthene	ug/l													0.86	0.96	1.2
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Acenaphthylene	ug/l													0.20U	0.18U	0.17U

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SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Anthracene	ug/l													0.058	0.050	0.060
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Benzo(a)anthracene	ug/l													0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Benzo(a)pyrene	ug/l													0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Benzo(b)fluoranthene	ug/l													0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Benzo(g,h,i)perylene	ug/l													0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Benzo(k)fluoranthene	ug/l													0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Chrysene	ug/l													0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Dibenz(a,h)anthracene	ug/l													0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Fluoranthene	ug/l													0.065	0.064	0.074
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Fluorene	ug/l													3.1	2.5	2.5
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Indeno(1,2,3-cd)pyrene	ug/l													0.020U	0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Naphthalene	ug/l													25D	29D	27D
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Phenanthrene	ug/l													1.5	0.93	0.47
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Pyrene	ug/l													0.050	0.056	0.056
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	TPH	TPH-Diesel	ug/l													1200Y	1300Y	1300Y
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	TPH	TPH-Gasoline	ug/l															
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	Benzene	ug/l													2.7	2.9	3.3
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	BTEX (total)	ug/l													106.84	93.44	135.30
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	Ethylbenzene	ug/l													24	22	33
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	m,p-Xylene	ug/l													78	66	96
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	o-Xylene	ug/l													0.94	0.84	1.4
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	Toluene	ug/l													1.2	1.7	1.6
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	Xylenes (total)	ug/l													78.94	66.84	97.4
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	2-Methylnaphthalene	ug/l														3.1	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Acenaphthene	ug/l														0.83	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Acenaphthylene	ug/l														0.18U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Anthracene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Benzo(a)anthracene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Benzo(a)pyrene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Benzo(b)fluoranthene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Benzo(g,h,i)perylene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Benzo(k)fluoranthene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Chrysene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Dibenz(a,h)anthracene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Fluoranthene	ug/l														0.028	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Fluorene	ug/l														3.3	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Indeno(1,2,3-cd)pyrene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Naphthalene	ug/l														32D	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Phenanthrene	ug/l														0.81	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	SVOA	Pyrene	ug/l														0.045	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	TPH	TPH-Diesel	ug/l														4000Y	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	TPH	TPH-Gasoline	ug/l															
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	VOA	Benzene	ug/l														4.9	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	VOA	BTEX (total)	ug/l														90.1J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	VOA	Ethylbenzene	ug/l														32J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	VOA	m,p-Xylene	ug/l														50J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	VOA	o-Xylene	ug/l														1.8	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	VOA	Toluene	ug/l														1.4	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	652	VOA	Xylenes (total)	ug/l														51.8J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	2-Methylnaphthalene	ug/l														2.1	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Acenaphthene	ug/l														0.25	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Acenaphthylene	ug/l														0.058U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Anthracene	ug/l														0.044	

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SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Benzo(a)anthracene	ug/l														0.0060J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Benzo(a)pyrene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Benzo(b)fluoranthene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Benzo(g,h,i)perylene	ug/l														0.0044J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Benzo(k)fluoranthene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Chrysene	ug/l														0.0049J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Dibenz(a,h)anthracene	ug/l														0.020U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Fluoranthene	ug/l														0.065	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Fluorene	ug/l														0.88	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Indeno(1,2,3-cd)pyrene	ug/l														0.0035J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Naphthalene	ug/l														1.3	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Phenanthrene	ug/l														0.29	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	SVOA	Pyrene	ug/l														0.052	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	TPH	TPH-Diesel	ug/l														1900Y	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	TPH	TPH-Gasoline	ug/l															
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	VOA	Benzene	ug/l														0.50U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	VOA	BTEX (total)	ug/l														7.38J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	VOA	Ethylbenzene	ug/l														1.2	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	VOA	m,p-Xylene	ug/l														6.0	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	VOA	o-Xylene	ug/l														0.18J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	VOA	Toluene	ug/l														0.50U	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	653	VOA	Xylenes (total)	ug/l														6.18J	
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	DIN	Antimony	ug/l				0.529											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	DIN	Lead	ug/l	1U	0.1UJ	0.3U	0.296											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	TIN	Antimony	ug/l				0.5U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	TIN	Lead	ug/l	1U	0.1UJ	2U	0.15U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	TIN	Thallium	ug/l				0.25U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	TPH	TPH-Diesel	ug/l				480											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	TPH	TPH-Gasoline	ug/l				6.5J											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	TPH	TPH-Heavy Fraction/Oil	ug/l				270J											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	VOA	Benzene	ug/l				1U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	VOA	Ethylbenzene	ug/l				1U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	VOA	Toluene	ug/l				1U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-706	VOA	Xylenes	ug/l				3U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	DIN	Antimony	ug/l				0.225											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	DIN	Lead	ug/l	1U	0.1J	0.3U	0.1U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	TIN	Antimony	ug/l				0.5U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	TIN	Lead	ug/l	1U	0.2J	2U	0.155											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	TIN	Thallium	ug/l				0.25U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	TPH	TPH-Diesel	ug/l				160U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	TPH	TPH-Gasoline	ug/l				63											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	TPH	TPH-Heavy Fraction/Oil	ug/l				280U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	VOA	Benzene	ug/l				0.63J											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	VOA	Ethylbenzene	ug/l				1U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	VOA	Toluene	ug/l				1U											
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	AMW-709	VOA	Xylenes	ug/l				3U											
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-202	TPH	TPH-Diesel	ug/l			100U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-202	TPH	TPH-Gasoline	ug/l			50U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-202	VOA	Benzene	ug/l			0.2U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-202	VOA	Ethylbenzene	ug/l			0.5U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-202	VOA	Toluene	ug/l			0.5U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-202	VOA	Xylenes	ug/l			1U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-203	TPH	TPH-Diesel	ug/l			133												

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-203	TPH	TPH-Gasoline	ug/l			50U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-203	VOA	Benzene	ug/l			0.2U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-203	VOA	Ethylbenzene	ug/l			0.5U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-203	VOA	Toluene	ug/l			0.5U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	E-203	VOA	Xylenes	ug/l			1U												
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	TPH	C10-C24 Aliphatics	ug/l	100U	81UJ													
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	TPH	C10-C24 Aromatics	ug/l	130UJ	81UJ													
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	TPH	C25-C36 Aliphatics	ug/l	100U	59U													
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	TPH	C25-C36 Aromatics	ug/l	100U	79U													
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	TPH	C6-C9 Aliphatics	ug/l	120J	180													
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	TPH	C6-C9 Aromatics	ug/l	27	20U													
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	TPH	TPH-Diesel	ug/l	230UJ	160UJ	556U	850	390										
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	TPH	TPH-Gasoline	ug/l	140	200	105	120	110										
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	TPH	TPH-Heavy Fraction/Oil	ug/l			1110U	190J											
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	VOA	Benzene	ug/l	2.4	2.3	2.65		2.8										
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	VOA	BTEX (total)	ug/l	3.15														
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	VOA	Ethylbenzene	ug/l	0.2U	0.24J	2U		2U										
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	VOA	m,p-Xylene	ug/l	5.5J	1.4	2.63		1J										
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	VOA	o-Xylene	ug/l	0.27J	0.2U	2U		2U										
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	VOA	Toluene	ug/l	0.44J	0.3U	2U		2U										
SWMU 60 Tank Farm A	TANK FARM A AREA	WLM	MW E501	VOA	Xylenes (total)	ug/l	0.75														
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	2-Methylnaphthalene	ug/l									0.11	0.096	0.14	0.14	0.13	0.13	0.18
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Acenaphthene	ug/l									0.0069J	0.0049J	0.020U	.0086J	0.011J	0.0067J	0.018J
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Acenaphthylene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.0077JX
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Anthracene	ug/l									0.020U	0.020U	0.020U	0.020U	0.0093J	0.020U	0.019U
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Benzo(a)anthracene	ug/l									0.020U	0.020U	0.020U	0.020U	0.0078J	0.020U	0.0029JX
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Benzo(a)pyrene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.019U
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Benzo(b)fluoranthene	ug/l									0.0032J	0.020U	0.020U	0.020U	0.0035J	0.020U	0.019U
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Benzo(g,h,i)perylene	ug/l									0.0039J	0.020U	0.020U	0.020U	0.020U	0.020U	0.019U
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Benzo(k)fluoranthene	ug/l									0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.019U
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Chrysene	ug/l									0.020U	0.020U	0.0058J	0.020U	0.017J	0.020U	0.019U
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Dibenz(a,h)anthracene	ug/l									0.0035J	0.020U	0.020U	0.020U	0.020U	0.020U	0.019U
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Fluoranthene	ug/l									0.0067J	0.020U	0.0050J	0.020U	0.010J	0.020U	0.0058J
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Fluorene	ug/l									0.018J	0.014J	0.047	0.029	0.085	0.018J	0.038
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Indeno(1,2,3-cd)pyrene	ug/l									0.0029J	0.020U	0.020U	0.020U	0.020U	0.020U	0.019U
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Naphthalene	ug/l									0.10	0.088	0.39	0.18B	1.0	0.21	0.20
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Phenanthrene	ug/l									0.023	0.020U	0.052	0.025	0.14	0.020J	0.031
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	SVOA	Pyrene	ug/l									0.0091J	0.020U	0.0036J	0.020U	0.011J	0.020U	0.0056J
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	TPH	TPH-Gasoline	ug/l					2000	6880J	3900J	6300	3900Z	2700Z	5100Z	3800Y	3400Y	2000Y	2800Z
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	TPH	TPH-Diesel	ug/l											560L				
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	VOA	Benzene	ug/l					34	30.8J	22.7J	16	14	9.6D	13D	12	8.3	6.9J	6.9
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	VOA	Ethylbenzene	ug/l					150	54J	65.9J	43	20	14D	30D	17	11	12J	12
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	VOA	m,p-Xylene	ug/l					580			1700	810D	720D	1400D	1200D	840D	680DJ	630D
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	VOA	Methyl Tert-Butyl Ether	ug/l					4U										
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	VOA	o-Xylene	ug/l					2.74J			1.0U	1.5	1.5JD	2.5D	1.9	1.7	1.8J	1.0
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	VOA	Toluene	ug/l					8.2	21.6J	11J	5.7	4.4	3.2D	7.2D	4.5	2.8	2.8J	2.0
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	VOA	Xylenes	ug/l						1290J	1590J	1700	811.5	721.5JD	1402.5D	1201.9D	841.7D	681.8	631.0D
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	DIN	Manganese	ug/l											2990				
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-113	TIN	Manganese	ug/l											3100				
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	C10-C24 Aliphatics	ug/l	100U	83U													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	C10-C24 Aromatics	ug/l	380	310													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	C25-C36 Aliphatics	ug/l	100U	62UJ													

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SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	C25-C36 Aromatics	ug/l	100U	82U													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	C6-C9 Aliphatics	ug/l	3500	10000J													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	C6-C9 Aromatics	ug/l	1600	4000U													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	GRO - Aliphatic Fraction	ug/l			4290												
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	GRO - Aromatic Fraction	ug/l			1620												
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	TPH-Diesel	ug/l	450	310	575U	200											
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	TPH-Gasoline	ug/l	5000	13000J	5900	2300	3300	5220J	3560	3700J	3400Y	3800Y	4500Y	4200Y	1600Y	2400Y	3200Z
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TPH	TPH-Heavy Fraction/Oil	ug/l			1150U	110J											
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	VOA	Benzene	ug/l	4U	0.2U	17.4	4	10U	0.5U	1U	1.0U	1.0U	0.50U	0.50U	0.50U	0.50U	0.080J	0.50U
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	VOA	BTEX (total)	ug/l	4U												0.85J	0.74J	0.56J
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	VOA	Ethylbenzene	ug/l	4U	4U	2.31	2U	3.5J	0.12J	0.24J	1.0U	1.0U	0.50U	0.070J	0.14J	0.12J	0.10J	0.060J
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	VOA	m,p-Xylene	ug/l	8U	1.9J	3.99		21			5.8	0.50JD	0.93J	0.35J	0.74	0.51	0.48J	0.40J
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	VOA	Methyl Tert-Butyl Ether	ug/l					10U										
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	VOA	o-Xylene	ug/l	4U	0.2UJ	2.24		10U			1.0U	1.0U	0.11J	0.50U	0.16J	0.090J	0.080J	0.50U
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	VOA	Toluene	ug/l	6U	0.3U	3.65	1.1J	4.1J	0.5U	1U	1.0U	0.26JD	1.4UJ	0.50U	0.66	0.13J	0.50UJ	0.10J
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	VOA	Xylenes	ug/l				3.1J		0.55J	4.94J	5.8		1.04J		0.90J	0.60J	0.56J	0.40J
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	VOA	Xylenes (total)	ug/l	4U							5.8		1.04J		0.90J	0.60J	0.56J	0.40J
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	TIN	Manganese	ug/l											2460				
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	C10-C24 Aliphatics	ug/l	100U	86U													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	C10-C24 Aromatics	ug/l	360UJ	430													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	C25-C36 Aliphatics	ug/l	100U	59UJ													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	C25-C36 Aromatics	ug/l	100U	79U													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	C6-C9 Aliphatics	ug/l	25000	36000J													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	C6-C9 Aromatics	ug/l	22000	21000													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	GRO - Aliphatic Fraction	ug/l			22400												
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	GRO - Aromatic Fraction	ug/l			14200												
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	TPH-Diesel	ug/l	400UJ	430	1450	1300							1400L				
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	TPH-Gasoline	ug/l	47000	57000J	36500	29000	30000	50600J	46700J	40000J	41000DY	53000DY	50000DY	46000DY	51000DY	36000DY	43000DZ
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	TPH	TPH-Heavy Fraction/Oil	ug/l			1120U	280U											
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	VOA	Benzene	ug/l	100	80U	54	50J	73J	69J	49.5J	31	39D	29D	31D	30D	23D	24D	20D
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	VOA	BTEX (total)	ug/l	19200	16974													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	VOA	Ethylbenzene	ug/l	1600	1600	1110	990	2200	1660J	1750J	1400	1700D	1600D	2000D	2100D	1900D	2100D	1900D
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	VOA	m,p-Xylene	ug/l	9500	9300	6100		10000			8600	10000D	9900D	12000D	12000D	12000D	12000D	11000D
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	VOA	Methyl Tert-Butyl Ether	ug/l					100U										
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	VOA	o-Xylene	ug/l	2600	2500J	1750		55.99995			2200	2800D	2700D	2900D	3700D	3300D	3600D	2900D
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	VOA	Toluene	ug/l	5400	4900	3270	3000	5600	6110J	4580J	3500	4100D	4400D	4800D	4600D	4100D	4800D	4000D
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	VOA	Xylenes	ug/l	12100	8200		7600		12100J	12500J	10,800		12600D	14900D	15700D	15300D	15600D	13900D
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW4B	VOA	Xylenes (total)	ug/l	12100	8200				12100J	12500J	10,800		12600D	14900D	15700D	15300D	15600D	13900D
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	C10-C24 Aliphatics	ug/l	100U	85U													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	C10-C24 Aromatics	ug/l	160	85UJ													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	C25-C36 Aliphatics	ug/l	100U	57UJ													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	C25-C36 Aromatics	ug/l	100U	76U													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	C6-C9 Aliphatics	ug/l	23	20U													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	TPH-Diesel	ug/l	190	170UJ	575U	130J											
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	TPH-Gasoline	ug/l	27	21	90U	12J	32U										
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	TPH	TPH-Heavy Fraction/Oil	ug/l			1150U	180J											
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U	2U										
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	VOA	BTEX (total)	ug/l	0.92														
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U	2U										
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	VOA	m,p-Xylene	ug/l	0.65	0.4U	2U		2U										

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SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	VOA	o-Xylene	ug/l	0.27	0.2UJ	2U		2U										
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U	2U										
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	VOA	Xylenes	ug/l				3U											
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	TFB-MW-4A	VOA	Xylenes (total)	ug/l	0.92														
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-102-8	TPH	TPH-Diesel	ug/l								86							
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-102-8	TPH	TPH-Gasoline	ug/l								25U							
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-102-8	VOA	Benzene	ug/l								1.0U							
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-102-8	VOA	Ethylbenzene	ug/l								1.0U							
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-102-8	VOA	Toluene	ug/l								1.0U							
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-102-8	VOA	Xylenes	ug/l								3.0U							
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-102-8	VOA	m,p-Xylene	ug/l								2.0U							
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-102-8	VOA	o-Xylene	ug/l								1.0U							
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-134-2	TPH	Benzene	ug/l			152												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-134-2	TPH	Ethylbenzene	ug/l			302												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-134-2	TPH	Toluene	ug/l			32.2												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-134-2	TPH	TPH-Diesel	ug/l			2870												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-134-2	TPH	TPH-Gasoline	ug/l			3850J												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-134-2	TPH	Xylenes	ug/l			373												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-134-2	VOA	Benzene	ug/l			144												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-139-4	TPH	Benzene	ug/l			0.2U												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-139-4	TPH	Ethylbenzene	ug/l			0.5U												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-139-4	TPH	Toluene	ug/l			0.5U												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-139-4	TPH	TPH-Diesel	ug/l			178												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-139-4	TPH	TPH-Gasoline	ug/l			50U												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	HMW-139-4	TPH	Xylenes	ug/l			1U												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	MRP-MW1	TPH	Benzene	ug/l			0.435J												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	MRP-MW1	TPH	Ethylbenzene	ug/l			25.6J												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	MRP-MW1	TPH	Toluene	ug/l			2.02J												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	MRP-MW1	TPH	TPH-Diesel	ug/l			9790												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	MRP-MW1	TPH	TPH-Gasoline	ug/l			359J												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	MRP-MW1	TPH	Xylenes	ug/l			93.3J												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	MRP-MW1	VOA	Benzene	ug/l			0.139U												
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	MRP-MW15	DIN	Lead	ug/l					0.169J	1U									
SWMU 62 New Housing Fuel Leak	DOWNTOWN HOUSING AREA	WLM	MRP-MW15	TIN	Lead	ug/l					0.205	1U									
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	TPH	Benzene	ug/l			0.2U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	TPH	Ethylbenzene	ug/l			0.5U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	TPH	Toluene	ug/l			0.5U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	TPH	TPH-Diesel	ug/l			744					1900	230Y	540Y	190Y	890Y	400Y	120Y	
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	TPH	TPH-Gasoline	ug/l			50U					47	15J	22J	100U	100U	100U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	TPH	Xylenes	ug/l			3.5												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	TPH	m,p-Xylene	ug/l															
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	TPH	o-Xylene	ug/l															
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	VOA	Benzene	ug/l								1.0U	0.50U	0.50UJ	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	VOA	Ethylbenzene	ug/l								1.0U	0.50U	0.50UJ	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	VOA	Toluene	ug/l								1.0U	0.50U	0.50UJ	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	VOA	Xylenes	ug/l								8.7	1.5	2.1J	0.22J	0.64	0.24J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	VOA	m,p-Xylene	ug/l								2.0U	0.50U	0.50UJ	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-103	VOA	o-Xylene	ug/l								8.7	1.5	2.1J	0.22J	0.64	0.24J		
SWMU 62, Eagle Bay Housing Complex (also Area 303)	DOWNTOWN HOUSING AREA	WLM	03-107	DIN	Lead	ug/l															14.8
SWMU 62, Eagle Bay Housing Complex (also Area 303)	DOWNTOWN HOUSING AREA	WLM	03-107	TIN	Lead	ug/l															14.7
SWMU 62, Eagle Bay Housing Complex (also Area 303)	DOWNTOWN HOUSING AREA	WLM	03-107	TPH	Benzene	ug/l			68.6												
SWMU 62, Eagle Bay Housing Complex (also Area 303)	DOWNTOWN HOUSING AREA	WLM	03-107	TPH	Ethylbenzene	ug/l			712												

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 62, Eagle Bay Housing Complex (also Area 303)	DOWNTOWN HOUSING AREA	WLM	03-107	TPH	Toluene	ug/l			938												
SWMU 62, Eagle Bay Housing Complex (also Area 303)	DOWNTOWN HOUSING AREA	WLM	03-107	TPH	TPH-Diesel	ug/l			19300												
SWMU 62, Eagle Bay Housing Complex (also Area 303)	DOWNTOWN HOUSING AREA	WLM	03-107	TPH	TPH-Gasoline	ug/l			10600												6100Y
SWMU 62, Eagle Bay Housing Complex (also Area 303)	DOWNTOWN HOUSING AREA	WLM	03-107	TPH	Xylenes	ug/l			1820												
SWMU 62, Eagle Bay Housing Complex (also Area 303)	DOWNTOWN HOUSING AREA	WLM	03-107	VOA	Benzene	ug/l															2.8D
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	DIN	Antimony	ug/l				0.1U											
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	DIN	Lead	ug/l			0.3U	0.267											
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TIN	Lead	ug/l			2U	0.15U											
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TIN	Thallium	ug/l				0.25U											
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	Benzene	ug/l			0.2U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	C10-C24 Aliphatics	ug/l	100U	78UJ													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	C10-C24 Aromatics	ug/l	210UJ	78UJ													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	C25-C36 Aliphatics	ug/l	100U	58UJ													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	C25-C36 Aromatics	ug/l	100U	77U													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	C6-C9 Aliphatics	ug/l	26	20U													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	Ethylbenzene	ug/l			0.5U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	Toluene	ug/l			0.5U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	TPH-Diesel	ug/l	290UJ	160UJ	588U	160U				50U	48U	15J	93U	54U	17J	17J	
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	TPH-Gasoline	ug/l	28	20U	90U	6.1J				25U	100U	100U	100U	100U	100U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	TPH-Heavy Fraction/Oil	ug/l			1180U	110J											
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	TPH	Xylenes	ug/l			1U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	VOA	Aggregate TPH	ug/l		0.2													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	VOA	Benzene	ug/l	0.2U	0.2UJ	0.5U	1U				1.0U	0.50U	0.50UJ	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	VOA	BTEX (total)	ug/l	0.44	0.2													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U				1.0U	0.50U	0.50UJ	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	VOA	m,p-Xylene	ug/l	0.44	0.4U	2U					2.0U	0.50U	0.50UJ	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	VOA	o-Xylene	ug/l	0.2U	0.2U	2U					1.0U	0.50U	0.50UJ	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U				1.0U	0.50U	0.50UJ	0.66U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	VOA	Xylenes	ug/l				3U				3.0U	1.0U	1.0UJ	1.0U	1.0U	1.0U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-109	VOA	Xylenes (total)	ug/l	0.44	0.2						3.0U	1.0U	1.0UJ	1.0U	1.0U	1.0U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	GW	03-502	TPH	TPH-Diesel	ug/l								8200	6400Z	4800Z	1300Y	1200Z	1400Y	1300L	
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	GW	03-502	TPH	TPH-Gasoline	ug/l								8200	6700DY	5300Y	3600Y	1500Y	3200Y	3400Y	3300Y
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	GW	03-502	VOA	Benzene	ug/l								5.4	1.8	1.5	0.64	0.15J	0.21J	1.0U	
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	GW	03-502	VOA	Ethylbenzene	ug/l								320	170D	180D	140D	80D	110D	66D	
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	GW	03-502	VOA	Toluene	ug/l								730	230D	180D	13	1.5	12	5.4D	
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	GW	03-502	VOA	Xylenes	ug/l								900	510D	520D	430D	142	430D	315D	
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	GW	03-502	VOA	m,p-Xylene	ug/l								660	370D	370D	310D	110	300D	220D	
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	GW	03-502	VOA	o-Xylene	ug/l								240	140D	150D	120D	32	130D	95D	
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	Benzene	ug/l			0.2U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	C10-C24 Aliphatics	ug/l	100U	81UJ													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	C10-C24 Aromatics	ug/l	100U	81UJ													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	C25-C36 Aliphatics	ug/l	100U	57U													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	C25-C36 Aromatics	ug/l	100U	76U													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	C6-C9 Aliphatics	ug/l	33J	20U													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	Ethylbenzene	ug/l			0.5U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	Toluene	ug/l			0.5U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	TPH-Diesel	ug/l	160UJ	160UJ	581U	160U				660	150Y	79J	80U	1200Y	1100Y	110Y	

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SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	TPH-Gasoline	ug/l	33	20U	90U	6.9J				25U	100U	100U	100U	14J	18J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	TPH-Heavy Fraction/Oil	ug/l			1160U	120J											
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	TPH	Xylenes	ug/l			1U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U				1.0U	0.5U	0.50U	0.50U	0.12J	0.55		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	VOA	BTEX (total)	ug/l	0.4U														
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U				1.0U	0.5U	0.50U	0.50U	0.50U	0.060J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U					2.0U	0.5U	0.50U	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	VOA	o-Xylene	ug/l	0.2U	0.2U	2U					1.0U	0.5U	0.50U	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U				1.0U	0.5U	0.50U	0.50U	0.65U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	VOA	Xylenes	ug/l				3U				3.0U	1.0U	1.0U	1.0U	1.0U	1.0U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	03-898	VOA	Xylenes (total)	ug/l	0.4U							3.0U	1.0U	1.0U	1.0U	1.0U	1.0U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	Benzene	ug/l			0.337												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	C10-C24 Aliphatics	ug/l	100U	150													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	C10-C24 Aromatics	ug/l	475	320J													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	C25-C36 Aliphatics	ug/l	100U	59UJ													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	C25-C36 Aromatics	ug/l	100U	79UJ													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	C6-C9 Aliphatics	ug/l	20UJ	20U													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	C6-C9 Aromatics	ug/l	130J	100													
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	Ethylbenzene	ug/l			1.51												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	GRO - Aromatic Fraction	ug/l			118												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	Toluene	ug/l			0.5U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	TPH-Diesel	ug/l	370UJ	480J	4170	1200				2500	1600Y	2700Y	1200Y	3800Y	3700Y	820Y	1500Y
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	TPH-Gasoline	ug/l	88J	82	150	99				49	85J	95J	61J	78J	77J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	TPH-Heavy Fraction/Oil	ug/l			1100U	190J											
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	TPH	Xylenes	ug/l			15.6												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	VOA	Benzene	ug/l	0.2U	0.2U	0.139U	0.39J				1.0U	0.50U	0.070J	0.050J	0.12J	0.12J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	VOA	BTEX (total)	ug/l	18.5														
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	VOA	Ethylbenzene	ug/l	1.5J	0.78	2.74	6.5				0.63J	0.84	0.82	0.18J	1.7	0.70		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	VOA	m,p-Xylene	ug/l	1.9J	4.7	5.88					2.0U	0.56	0.57	0.19J	0.58	0.49J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	VOA	o-Xylene	ug/l	5.8J	6.6J	7.59					2.4	4.6	5.7	2.0	7.2	4.8		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U				1.0U	0.13J	0.50U	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	VOA	Xylenes	ug/l				7.6				2.4	5.16	6.27	2.19J	7.78	5.29J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	AMW-704	VOA	Xylenes (total)	ug/l	17							2.4	5.16	6.27	2.19J	7.78	5.29J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	CTO124-MW15	TPH	Benzene	ug/l			1.16												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	CTO124-MW15	TPH	Ethylbenzene	ug/l			23.9												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	CTO124-MW15	TPH	Toluene	ug/l			3.48												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	CTO124-MW15	TPH	TPH-Diesel	ug/l			9820												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	CTO124-MW15	TPH	TPH-Gasoline	ug/l			551												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	CTO124-MW15	TPH	Xylenes	ug/l			136												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	CTO124-MW15	VOA	Benzene	ug/l			0.822J												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-1	TPH	Benzene	ug/l			0.2U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-1	TPH	Ethylbenzene	ug/l			0.5U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-1	TPH	Toluene	ug/l			0.5U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-1	TPH	TPH-Diesel	ug/l			313												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-1	TPH	TPH-Gasoline	ug/l			50U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-1	TPH	Xylenes	ug/l			1U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-10	TPH	Benzene	ug/l			1.99												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-10	TPH	Ethylbenzene	ug/l			3.84												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-10	TPH	Toluene	ug/l			0.5U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-10	TPH	TPH-Diesel	ug/l			4850												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-10	TPH	TPH-Gasoline	ug/l			60.3												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-10	TPH	Xylenes	ug/l			3.93												

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SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-10	VOA	Benzene	ug/l			1.66												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-12	TPH	TPH-Diesel	ug/l								50U	48U	97U	49U	49U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-12	TPH	TPH-Gasoline	ug/l								25U	100U	100U	100U	100U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-12	VOA	Benzene	ug/l								1.0U	0.50U	0.50U	0.50U	0.50U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-12	VOA	Ethylbenzene	ug/l								1.0U	0.50U	0.50U	0.50U	0.50U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-12	VOA	Toluene	ug/l								1.0U	0.24J	0.98U	0.50U	0.50U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-12	VOA	Xylenes	ug/l								3.0U	1.0U	1.0U	1.0U	1.0U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-12	VOA	m,p-Xylene	ug/l								2.0U	0.50U	0.50U	0.50U	0.50U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-12	VOA	o-Xylene	ug/l								1.0U	0.50U	0.50U	0.50U	0.50U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-2	TPH	Benzene	ug/l			0.92												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-2	TPH	Ethylbenzene	ug/l			4.44												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-2	TPH	Toluene	ug/l			0.754												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-2	TPH	TPH-Diesel	ug/l			13900J												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-2	TPH	TPH-Gasoline	ug/l			551												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-2	TPH	Xylenes	ug/l			58.5												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-2	VOA	Benzene	ug/l			0.139U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-4	TPH	Benzene	ug/l			1U												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-4	TPH	Ethylbenzene	ug/l			6.72												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-4	TPH	Toluene	ug/l			3.56												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-4	TPH	TPH-Diesel	ug/l			19900												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-4	TPH	TPH-Gasoline	ug/l			421												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	HMW-303-4	TPH	Xylenes	ug/l			33.4												
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-7	TPH	TPH-Diesel	ug/l													21000DY	14000Y	15000Y
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-7	TPH	TPH-Gasoline	ug/l													770H		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-7	VOA	Benzene	ug/l													0.28J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-7	VOA	Ethylbenzene	ug/l													36		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-7	VOA	Toluene	ug/l													1.4		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-7	VOA	Xylenes	ug/l													136		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-7	VOA	m,p-Xylene	ug/l													86		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-7	VOA	o-Xylene	ug/l													50		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-14	TPH	TPH-Diesel	ug/l								1800	890Y	930Y	310Y	1200Y			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-14	TPH	TPH-Gasoline	ug/l								47	37J	31J	22J	20J			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-14	VOA	Benzene	ug/l								1.0U	0.50U	0.50U	0.50U	0.50U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-14	VOA	Ethylbenzene	ug/l								1.0U	0.50U	0.090J	0.50U	0.50U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-14	VOA	Toluene	ug/l								1.0U	0.16J	0.59U	0.50U	0.54U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-14	VOA	Xylenes	ug/l								3.0U	1.0U	1.0U	1.0U	1.0U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-14	VOA	m,p-Xylene	ug/l								2.0U	0.50U	0.50U	0.50U	0.50U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	WLM	MW-303-14	VOA	o-Xylene	ug/l								1.0U	0.50U	0.50U	0.50U	0.50U			
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-13 (NW-2)	TPH	TPH-Diesel	ug/l								3400		1800Y	200Y	2100Y	2300Y	56Y	430Y
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-13 (NW-2)	TPH	TPH-Gasoline	ug/l								94		35J	22J	15J	25J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-13 (NW-2)	VOA	Benzene	ug/l								1.0U		0.50U	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-13 (NW-2)	VOA	Ethylbenzene	ug/l								0.94J		0.41J	0.50U	0.25J	0.46J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-13 (NW-2)	VOA	Toluene	ug/l								1.0U		0.50U	0.50U	0.54U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-13 (NW-2)	VOA	Xylenes	ug/l								11		4.04J	1.0U	1.98J	3.69J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-13 (NW-2)	VOA	m,p-Xylene	ug/l								2.0U		0.44J	0.50U	0.28J	0.19J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-13 (NW-2)	VOA	o-Xylene	ug/l								11		3.6	0.50U	1.7	3.5		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-14 (NW-3)	TPH	TPH-Diesel	ug/l								660	670Y	440Y	270Y	270Y	530Y	570Y	
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-14 (NW-3)	TPH	TPH-Gasoline	ug/l								35	29J	22J	19J	14J	18J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-14 (NW-3)	VOA	Benzene	ug/l								1.0U	0.5U	0.50UJ	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-14 (NW-3)	VOA	Ethylbenzene	ug/l								0.74J	0.5U	0.090J	0.50U	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-14 (NW-3)	VOA	Toluene	ug/l								1.0U	0.5U	0.50UJ	0.50U	0.62U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-14 (NW-3)	VOA	Xylenes	ug/l								1.65J	1.0	0.52J	0.28J	1.0U	1.0U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-14 (NW-3)	VOA	m,p-Xylene	ug/l								0.98J	0.5U	0.50UJ	0.50U	0.50U	0.50U		

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SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-14 (NW-3)	VOA	o-Xylene	ug/l								0.67J	1.0	0.52J	0.28J	0.50U	0.50U		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-15	TPH	TPH-Diesel	ug/l									5500Y						
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-15	TPH	TPH-Gasoline	ug/l									440H						
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-15	VOA	Benzene	ug/l									0.50U						
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-15	VOA	Ethylbenzene	ug/l									10						
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-15	VOA	Toluene	ug/l									0.34J						
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-15	VOA	Xylenes	ug/l									52						
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-15	VOA	m,p-Xylene	ug/l									42						
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-15	VOA	o-Xylene	ug/l									10						
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-16 (NW-1)	TPH	TPH-Diesel	ug/l								10000J	2500Y	6300Y	2900Y	8600Y	6100Y	2700Y	4800Y
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-16 (NW-1)	TPH	TPH-Gasoline	ug/l								92	120H	120H	92J	110H	110H		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-16 (NW-1)	VOA	Benzene	ug/l								1.0U	0.50U	0.16J	0.10J	0.11J	0.090J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-16 (NW-1)	VOA	Ethylbenzene	ug/l								3.4	0.52	1.1	1.4	1.3	0.89		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-16 (NW-1)	VOA	Toluene	ug/l								1.0U	0.50U	0.50U	0.50U	0.50U	0.13J		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-16 (NW-1)	VOA	Xylenes	ug/l								2.4	1.34J	2.85J	2.8	3.03	3.02		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-16 (NW-1)	VOA	m,p-Xylene	ug/l								2.4	1.2	2.5	2.2	2.2	2.2		
SWMU 62, Eagle Bay Housing Complex	DOWNTOWN HOUSING AREA	RW	RW-303-16 (NW-1)	VOA	o-Xylene	ug/l								1.0U	0.14J	0.35J	0.60	0.83	0.82		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	TPH	Benzene	ug/l			0.2U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	TPH	Ethylbenzene	ug/l			2.24												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	TPH	Toluene	ug/l			0.684												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	TPH	TPH-Diesel	ug/l			11500						9000Y	4800Y	5200Y	5600Y	9600Y	4900Y	5500Y
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	TPH	TPH-Gasoline	ug/l			199UJ						200H	340H	240Y	190H	270H	200H	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	TPH	Xylenes	ug/l			18.6												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	VOA	Benzene	ug/l									0.50U	0.50U	0.050J	0.50U	0.50U	0.50U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	VOA	Ethylbenzene	ug/l									2.4	5.6	3.7	5.2	4.3	4.0	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	VOA	Toluene	ug/l									0.73	1.9U	1.2	0.83	0.94	0.82U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	VOA	Xylenes	ug/l									16.9	48	36.6	31.3	38	38	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	VOA	m,p-Xylene	ug/l									3.9	11	8.6	7.3	11	11	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-104	VOA	o-Xylene	ug/l									13	37	28	24	27	27	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-155	TPH	TPH-Diesel	ug/l					750	1660	2070	1500	2400Y	3300Y	1600Y	2500Y	3100Y	2500Y	4400DY
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-155	TPH	TPH-Gasoline	ug/l					43J	61.5UJ	22J	31	37J	33J	29J	22J	40J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-155	VOA	Benzene	ug/l					2U	0.5U	0.5U	1.0U	0.50U	0.50U	0.040J	0.50U	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-155	VOA	Ethylbenzene	ug/l					2U	0.5U	0.5U	1.0U	0.50U	0.50U	0.50U	0.50U	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-155	VOA	m,p-Xylene	ug/l					2U			2.0U	0.50U	0.50U	0.50U	0.50U	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-155	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-155	VOA	o-Xylene	ug/l					2U			1.0U	0.50U	0.10J	0.50U	0.50U	0.11J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-155	VOA	Toluene	ug/l					2U	0.5U	0.5U	1.0U	0.14J	0.50U	0.50U	0.67U	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-155	VOA	Xylenes	ug/l						1U	1U	3.0U	1.0U	0.10J	1.0U	1.0U	0.11J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	Benzene	ug/l			1.34												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	C10-C24 Aliphatics	ug/l	100U	82UJ													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	C10-C24 Aromatics	ug/l	170UJ	150J													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	C25-C36 Aliphatics	ug/l	100U	58U													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	C25-C36 Aromatics	ug/l	100U	77U													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	C6-C9 Aliphatics	ug/l	340J	1400													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	C6-C9 Aromatics	ug/l	76	330													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	Ethylbenzene	ug/l			0.5U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	GRO - Aliphatic Fraction	ug/l			201												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	Toluene	ug/l			0.5U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	TPH-Diesel	ug/l	240UJ	180J	2600	1600	710	302			510Y	590Y	510Y	660Y	540Y	430Y	360Y
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	TPH-Gasoline	ug/l	420	1700	203	250	300	155			57J	37J	23J	30J	21J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	TPH-Heavy Fraction/Oil	ug/l			1050U	800											
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	TPH	Xylenes	ug/l			1U												

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SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	VOA	Aggregate TPH	ug/l		75													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	VOA	Benzene	ug/l	12	3.9J	0.954	3.8	3.8	0.5U			0.50U	0.20J	0.070J	0.10J	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	VOA	BTEX (total)	ug/l	34	221													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	VOA	Ethylbenzene	ug/l	5.5	73	2U	1.3	5.6	0.5U			0.50U	0.50U	0.50U	0.50U	0.050J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	VOA	m,p-Xylene	ug/l	9.3	46	2U		4				0.50U	0.50U	0.11J	0.50U	0.12J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	VOA	o-Xylene	ug/l	2.6	0.27J	2U		3.15				0.50U	0.50U	0.50U	0.15J	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	VOA	Toluene	ug/l	2.5	4.8	2U	1U	2U	0.5U			0.13J	0.57 U	0.50U	0.50U	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	VOA	Xylenes	ug/l				2.8J		1U			1.0U	1.0U	0.11J	0.15J	0.12J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-619	VOA	Xylenes (total)	ug/l	11.5	46							1.0U	1.0U	0.11J	0.15J	0.12J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	Benzene	ug/l			0.2U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	C10-C24 Aliphatics	ug/l		82U													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	C10-C24 Aromatics	ug/l		82UJ													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	C25-C36 Aliphatics	ug/l		61UJ													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	C25-C36 Aromatics	ug/l		82U													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	C6-C9 Aliphatics	ug/l		79J													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	C6-C9 Aromatics	ug/l		31													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	Ethylbenzene	ug/l			9.19												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	GRO - Aromatic Fraction	ug/l			398												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	Toluene	ug/l			0.5												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	TPH-Diesel	ug/l		150U	1980	780											
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	TPH-Gasoline	ug/l		110J	394	520											
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	TPH-Heavy Fraction/Oil	ug/l			1110U	190J											
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	TPH	Xylenes	ug/l			28.8												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	VOA	Benzene	ug/l		0.2U	0.5U	1U											
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	VOA	Ethylbenzene	ug/l		0.84J	17.8	16											
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	VOA	m,p-Xylene	ug/l		1.1J	38												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	VOA	o-Xylene	ug/l		0.8J	26.2												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	VOA	Toluene	ug/l		0.3U	2U	1U											
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-696	VOA	Xylenes	ug/l				65											
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	TPH	TPH-Diesel	ug/l			556U	160U				160	49U	140Y	60Y	100U	53U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	TPH	TPH-Gasoline	ug/l			90U	7J				25U	100U	100 U	100U	100U	100U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	TPH	TPH-Heavy Fraction/Oil	ug/l			1110U	120J											
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	VOA	Benzene	ug/l			0.5U	1U				1.0U	0.50U	0.12J	0.070J	0.060J	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	VOA	Ethylbenzene	ug/l			2U	1U				1.0U	0.50U	0.080J	0.50U	0.060J	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	VOA	m,p-Xylene	ug/l			2U					2.0U	0.50U	0.20J	0.17J	0.16J	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	VOA	o-Xylene	ug/l			2U					1.0U	0.50U	0.50U	0.50U	0.50U	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	VOA	Toluene	ug/l			2U	1U				1.0U	0.14J	0.50U	0.50U	0.50U	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-697	VOA	Xylenes	ug/l				3U				3.0U	1.0U	0.20J	0.17J	0.16J	1.0U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	TPH	Benzene	ug/l			0.238												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	TPH	Ethylbenzene	ug/l			8.73												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	TPH	Toluene	ug/l			0.597												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	TPH	TPH-Diesel	ug/l			4620					1800	2100Y	1500Y	860Y	2400Y	1500Y	1600Y	1700Y
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	TPH	TPH-Gasoline	ug/l			101					150	160H	170H	130Y	170H	170H	120HJ	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	TPH	Xylenes	ug/l			12.8												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	TPH	Xylenes	ug/l			12.8												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	VOA	Benzene	ug/l			0.139U					1.0U	0.50U	0.090J	0.50U	0.11J	0.090J	0.080J	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	VOA	Ethylbenzene	ug/l								12	13	13	9.2	9.5	9.5	9.1	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	VOA	Toluene	ug/l								1.0U	0.73	0.77U	0.68	0.97	0.50U	0.95	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	VOA	m,p-Xylene	ug/l								6.7	6.3	7.4	5.1	9.7	8.3	7.2	

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	VOA	o-Xylene	ug/l								0.78J	2.2	0.82	1.7	1	3.4	5.9	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-778	VOA	Xylenes	ug/l								7.48J	8.5	8.22	6.8	10.7	11.7	13.1	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-802	TPH	TPH-Diesel	ug/l								53U	48U	99U	28J	49U	21J	54U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-802	TPH	TPH-Gasoline	ug/l								25U	19J	100U	100U	100U	100U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-802	VOA	Benzene	ug/l								1.0U	0.50U	0.50U	0.040J	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-802	VOA	Ethylbenzene	ug/l								1.0U	0.50U	0.50U	0.080J	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-802	VOA	Toluene	ug/l								1.0U	0.12J	0.50U	0.50U	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-802	VOA	m,p-Xylene	ug/l								2.0U	0.50U	0.50U	0.34J	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-802	VOA	o-Xylene	ug/l								1.0U	0.50U	0.50U	0.080J	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-802	VOA	Xylenes	ug/l								3.0U	1.0U	1.0U	0.42J	1.0U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	C10-C24 Aliphatics	ug/l	100U	81UJ													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	C10-C24 Aromatics	ug/l	110UJ	81UJ													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	C25-C36 Aliphatics	ug/l	100U	57U													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	C25-C36 Aromatics	ug/l	100U	76U													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	C6-C9 Aliphatics	ug/l	20UJ	20U													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	C6-C9 Aromatics	ug/l	20U	20U													
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	GRO - Aliphatic Fraction	ug/l			90U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	GRO - Aromatic Fraction	ug/l			30U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	TPH-Diesel	ug/l	180UJ	160UJ	568U	170U				51U	50U	22J	49U	49U	49U	15J	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	TPH-Gasoline	ug/l	20U	20U	90U	50U				25U	100U	100U	100U	100U	100U	100U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	TPH	TPH-Heavy Fraction/Oil	ug/l			1140U	130J											
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	VOA	Benzene	ug/l	0.2U	0.2U	0.5U	1U				1.0U	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	VOA	BTEX (total)	ug/l	0.4U														
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U				1.0U	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U					2.0U	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	VOA	o-Xylene	ug/l	0.2U	0.2U	2U					1.0U	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U				1.0U	0.16J	0.50U	0.50U	0.50U	0.50U	0.50U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	VOA	Xylenes	ug/l				3U				3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	03-895	VOA	Xylenes (total)	ug/l	0.4U							3.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	TPH	Benzene	ug/l			0.2U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	TPH	Ethylbenzene	ug/l			2.91												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	TPH	Toluene	ug/l			0.805												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	TPH	TPH-Diesel	ug/l			15800J												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	TPH	TPH-Gasoline	ug/l			111UJ												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	TPH	Xylenes	ug/l			25.2												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	VOA	Benzene	ug/l															
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	VOA	Ethylbenzene	ug/l															
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	VOA	Toluene	ug/l															
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	VOA	m,p-Xylene	ug/l															
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	VOA	o-Xylene	ug/l															
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-1	VOA	Xylenes	ug/l															
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-6	TPH	TPH-Diesel	ug/l								520	410Y	720Y	1100Y	1500Y	1300Y		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-6	TPH	TPH-Gasoline	ug/l								35	33J	54J	71J	43J	61J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-6	VOA	Benzene	ug/l								1.0U	0.50U	0.50U	0.50U	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-6	VOA	Ethylbenzene	ug/l								1.0U	0.50U	0.28J	0.28J	0.23J			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-6	VOA	Toluene	ug/l								1.0U	0.11J	0.50U	0.50U	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-6	VOA	Xylenes	ug/l								1.9	0.68	2.92	2.78J	2.09J			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-6	VOA	m,p-Xylene	ug/l								2.0U	0.50U	0.62	0.48J	0.29J			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-102-6	VOA	o-Xylene	ug/l								1.9	0.68	2.3	2.3	1.8			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-107-2	TPH	TPH-Diesel	ug/l									50U	53J	57Y	150Z	130Y		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-107-2	TPH	TPH-Gasoline	ug/l									16J	100U	15J	100U	15J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-107-2	VOA	Benzene	ug/l									0.50U	0.50U	0.50U	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-107-2	VOA	Ethylbenzene	ug/l									0.50U	0.50U	0.50U	0.50U			

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-107-2	VOA	Toluene	ug/l									0.14J	0.50U	0.50U	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-107-2	VOA	m,p-Xylene	ug/l									0.50U	0.50U	0.50U	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-107-2	VOA	o-Xylene	ug/l									0.50U	0.50U	0.50U	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-107-2	VOA	Xylenes	ug/l									1.0U	1.0U	1.0U	1.0U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-2	TPH	Benzene	ug/l			19.4												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-2	TPH	Ethylbenzene	ug/l			43.4												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-2	TPH	Toluene	ug/l			4.32												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-2	TPH	TPH-Diesel	ug/l			8940												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-2	TPH	TPH-Gasoline	ug/l			961												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-2	TPH	Xylenes	ug/l			193												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-2	VOA	Benzene	ug/l			17.6												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-3	TPH	TPH-Diesel	ug/l								360	470Y	170Z	230Y	390Z	240Y		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-3	TPH	TPH-Gasoline	ug/l								49	86J	19J	31J	28J	32J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-3	VOA	Benzene	ug/l								1.0U	0.39J	0.24J	0.15J	0.23J			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-3	VOA	Ethylbenzene	ug/l								2.0	4.1	0.24J	0.34J	0.55			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-3	VOA	Toluene	ug/l								1.0U	0.29J	0.87U	0.50U	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-3	VOA	m,p-Xylene	ug/l								2.9	5.0	0.66	0.80	0.92			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-3	VOA	o-Xylene	ug/l								1.0U	0.50U	0.11J	0.16J	0.50U			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-139-3	VOA	Xylenes	ug/l								2.9	5.0	0.77J	0.96J	0.92			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	TPH	Benzene	ug/l			0.2U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	TPH	Ethylbenzene	ug/l			0.5U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	TPH	Toluene	ug/l			0.5U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	TPH	TPH-Diesel	ug/l			2070					1900	1200Y	1100Y	1300Y	1700Y	1300Y	1300Y	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	TPH	TPH-Gasoline	ug/l			50U					26	36J	32J	32J	23J	42J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	TPH	Xylenes	ug/l			1.07												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	VOA	Benzene	ug/l								1.0U	0.50U	0.080J	0.060J	0.50U	0.060J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	VOA	Ethylbenzene	ug/l								1.0U	0.50U	0.50U	0.50U	0.50U	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	VOA	Toluene	ug/l								1.0U	0.14J	0.59U	0.50U	0.64U	0.50U		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	VOA	m,p-Xylene	ug/l								2.0U	0.87	0.86	0.49J	0.57	0.84		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	VOA	o-Xylene	ug/l								1.0U	0.38J	0.34J	0.41J	0.27J	0.37J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	HMW-146-3	VOA	Xylenes	ug/l								3.0U	1.25J	1.20J	0.90J	0.84J	1.21J		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	DIN	Lead	ug/l															1.74
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	TIN	Lead	ug/l															1.93
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	TPH	Benzene	ug/l			133												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	TPH	Ethylbenzene	ug/l			440												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	TPH	Toluene	ug/l			25U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	TPH	TPH-Diesel	ug/l			2590UJ					840	770Z		650Y	910Z	1600L	890L	1300L
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	TPH	TPH-Gasoline	ug/l			18200					3100	8400DY		4700Z	2300Y	4800Y	2900Y	5900Y
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	TPH	Xylenes	ug/l			3040												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	VOA	Benzene	ug/l			137					39	67D		75D	43	29D	35J	94D
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	VOA	Ethylbenzene	ug/l								94	320D		230D	120D	210D	130DJ	310D
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	VOA	Toluene	ug/l								1.8	3.7D		4.6D	1.9	1.7JD	6.9J	6.1D
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	VOA	m,p-Xylene	ug/l								730	1500D		1300D	620D	860D	650DJ	1500D
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	VOA	o-Xylene	ug/l								1.0U	1.2JD		13D	0.33J	0.85JD	7.7J	5.0D
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW2	VOA	Xylenes	ug/l								730	1501.2JD		1313D	620.33DJ	860.85JD	657.7J	1505D
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	TPH	Benzene	ug/l			40U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	TPH	Ethylbenzene	ug/l			1860												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	TPH	Toluene	ug/l			5690												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	TPH	TPH-Diesel	ug/l			6930UJ					1800	6300Z		2700Y		1200L	2600L	4600L
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	TPH	TPH-Gasoline	ug/l			44100					38000	38000DY		40000DY		34000DY	31000DY	60000DY
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	TPH	Xylenes	ug/l			10100												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	VOA	Benzene	ug/l								2.4J	3.2JD		5.5D		2.5U	0.80JD	1.6JD
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	VOA	Ethylbenzene	ug/l								2500	1500D		2100D		1900D	1900DJ	2200D

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	VOA	Toluene	ug/l								730	680JD		610D		270D	230DJ	280D
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	VOA	m,p-Xylene	ug/l								11000	6700D		9200D		8500D	8800DJ	10000D
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	VOA	o-Xylene	ug/l								2100	1700D		2200D		2300D	2600DJ	2600D
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	VOA	Xylenes	ug/l								13100	8400D		11400D		10800D	11400DJ	12600D
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-102-4	TPH	Benzene	ug/l			0.2U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-102-4	TPH	Ethylbenzene	ug/l			5.03												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-102-4	TPH	Toluene	ug/l			0.5U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-102-4	TPH	TPH-Diesel	ug/l			18700												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-102-4	TPH	TPH-Gasoline	ug/l			101												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-102-4	TPH	TPH-Heavy Fraction/Oil	ug/l			750U												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-102-4	TPH	Xylenes	ug/l			9												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-107-1	TPH	TPH-Diesel	ug/l								3400	4000Y	4100Y	3400Y	4400Y	3600Y	2900Y	2700Y
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-107-1	TPH	TPH-Gasoline	ug/l								520	270H	480H	400Y	400H	310H		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-107-1	VOA	Benzene	ug/l								0.88J	0.85	0.86	0.54	0.26J			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-107-1	VOA	Ethylbenzene	ug/l								12	12	14	18	8.4			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-107-1	VOA	Toluene	ug/l								2.2	3.1	3.2U	2.6	2			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-107-1	VOA	Xylenes	ug/l								48	33.7	32.1	42.7	22.6			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-107-1	VOA	m,p-Xylene	ug/l								27	25	29	36	21			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-107-1	VOA	o-Xylene	ug/l								21	8.7	3.1	6.7	1.6			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-10	TPH	Benzene	ug/l			7.22J												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-10	TPH	Ethylbenzene	ug/l			44.2J												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-10	TPH	Toluene	ug/l			3.56J												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-10	TPH	TPH-Diesel	ug/l			5030												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-10	TPH	TPH-Gasoline	ug/l			689												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-10	TPH	Xylenes	ug/l			156J												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-10	VOA	Benzene	ug/l			5.15												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	TPH	Benzene	ug/l			3.47												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	TPH	Ethylbenzene	ug/l			14.3												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	TPH	Toluene	ug/l			1.24												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	TPH	TPH-Diesel	ug/l			7450				3500	6300J	5600Y	4700Y	5600Y	4900Y	4800Y	7100Y	4300Y
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	TPH	TPH-Gasoline	ug/l			214				208	440	470H	700H	240Y	410H	330H		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	TPH	Xylenes	ug/l			34.1												
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	VOA	Benzene	ug/l			3.56				1.58	1.6	1.1	1.1	0.73	0.89	0.83		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	VOA	Ethylbenzene	ug/l							14.3	16	27	34	14	26	18		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	VOA	Toluene	ug/l							2.14	3.2	2.8	7.1	2.1	3.8	3.5		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	VOA	Xylenes	ug/l							27.1	41	50	74	29	53	50		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	VOA	m,p-Xylene	ug/l							27.1	16	23	38	12	24	19		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-134-11	VOA	o-Xylene	ug/l							27.1	25	27	36	17	29	31		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-146-1	TPH	TPH-Diesel	ug/l									12000Y	12000Y	6800Y	13000Y	11000Y	7700Y	9000Y
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-146-1	TPH	TPH-Gasoline	ug/l									220H	340H	300Y	320H	340H		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-146-1	VOA	Benzene	ug/l									0.14J	0.10J	0.10J	0.090J			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-146-1	VOA	Ethylbenzene	ug/l									3.7	2.8	2.7	4.1			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-146-1	VOA	Toluene	ug/l									0.61	1.1U	0.50U	0.82			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-146-1	VOA	Xylenes	ug/l									35	31	26	43			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-146-1	VOA	m,p-Xylene	ug/l									19	16	16	27			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-146-1	VOA	o-Xylene	ug/l									16	15	10	16			
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-187-1	TPH	TPH-Diesel	ug/l								3900	3300Y	3500Y	2400Y	4400Z	2400Y	2300Y	2800Y
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-187-1	TPH	TPH-Gasoline	ug/l								820	630H	1100H	800Y	800H	290H		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-187-1	VOA	Benzene	ug/l								18	11	14	8.0	3.6	1.2	2.6	
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-187-1	VOA	Ethylbenzene	ug/l								83	58	51	48	66	21		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-187-1	VOA	Toluene	ug/l								1.0U	0.28J	0.92U	3.8	1	1.7		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-187-1	VOA	Xylenes	ug/l								66.6	75	210D	128	125	34.4		
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-187-1	VOA	m,p-Xylene	ug/l								58	55	130	92	94	26		

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SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MW-187-1	VOA	o-Xylene	ug/l								8.6	20	80D	36	31	8.4		
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Acenaphthene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Acenaphthylene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Anthracene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Benzo(a)anthracene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Benzo(a)pyrene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Benzo(b)fluoranthene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Benzo(g,h,i)perylene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Benzo(k)fluoranthene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Chrysene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Dibenz(a,h)anthracene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Fluoranthene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Fluorene	ug/l			0.88												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Naphthalene	ug/l			8.57												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Phenanthrene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	SVOA	Pyrene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	TPH	TPH-Diesel	ug/l			16900				7080J	11000	6600Y	4700Y	7700Y	6100Y	5600Y	5500Y	11000Y
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	TPH	TPH-Gasoline	ug/l			316				313	480	380Z	440Y					
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,1,1,2-Tetrachloroethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,1,1-Trichloroethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,1,2,2-Tetrachloroethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,1,2-Trichloroethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,1-Dichloroethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,1-Dichloroethene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,1-Dichloropropene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,2,3-Trichlorobenzene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,2,3-Trichloropropane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,2,4-Trichlorobenzene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,2,4-Trimethylbenzene	ug/l			73.1												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,2-Dibromo-3-chloropropane	ug/l			5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,2-Dibromoethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,2-Dichlorobenzene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,2-Dichloroethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,2-Dichloropropane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,3,5-Trimethylbenzene	ug/l			18.3												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,3-Dichlorobenzene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,3-Dichloropropane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	1,4-Dichlorobenzene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	2,2-Dichloropropane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	2-Butanone	ug/l			25.6												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	2-Chlorotoluene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	2-Hexanone	ug/l			10U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	4-Chlorotoluene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	4-Isopropyltoluene	ug/l			9.25												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	4-Methyl-2-pentanone	ug/l			10U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Acetone	ug/l			25U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Benzene	ug/l			1.44				0.71	0.57J	0.21J						
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Bromobenzene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Bromochloromethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Bromodichloromethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Bromoform	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Bromomethane	ug/l			2UJ												

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Carbon disulfide	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Carbon tetrachloride	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Chlorobenzene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Chloroethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Chloroform	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Chloromethane	ug/l			5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	cis-1,2-Dichloroethene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	cis-1,3-Dichloropropene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Dibromochloromethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Dibromomethane	ug/l			1UJ												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Dichlorodifluoromethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Ethylbenzene	ug/l			20.8				13.5	20	21						
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Hexachlorobutadiene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Isopropylbenzene	ug/l			2.82												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	m,p-Xylene	ug/l			38					67	51						
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Methylene chloride	ug/l			5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Naphthalene	ug/l			40.5												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	n-Butylbenzene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	n-Propylbenzene	ug/l			6.33												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	o-Xylene	ug/l			35.6					35	6.3						
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	sec-Butylbenzene	ug/l			1.63												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Styrene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	tert-Butylbenzene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Tetrachloroethene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Toluene	ug/l			6				5.57	3.8	0.42J						
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	trans-1,2-Dichloroethene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	trans-1,3-Dichloropropene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Trichloroethene	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Trichlorofluoromethane	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Vinyl chloride	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Xylenes	ug/l			64.8				66.2	102	57.3						
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	TPH	TPH-Diesel	ug/l			9220				2890J	9000	1000Y	2600Y	4300Y	4300Y	5900Y	5600Y	5000Y
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	TPH	TPH-Gasoline	ug/l			3190				541	1300	72J	370Y	1100Y	820JH	990H	490Y	
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,1,1,2-Tetrachloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,1,1-Trichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,1,2,2-Tetrachloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,1,2-Trichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,1-Dichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,1-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,1-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,2,3-Trichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,2,3-Trichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,2,4-Trichlorobenzene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,2,4-Trimethylbenzene	ug/l				186											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,2-Dibromo-3-chloropropane	ug/l				2.5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,2-Dibromoethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,2-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,2-Dichloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,2-Dichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,3,5-Trimethylbenzene	ug/l				24.9											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,3-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,3-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	1,4-Dichlorobenzene	ug/l				1U											

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Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	2,2-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	2-Butanone	ug/l				500U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	2-Chloroethyl vinyl ether	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	2-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	2-Hexanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	4-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	4-Isopropyltoluene	ug/l				7.21											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	4-Methyl-2-pentanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Benzene	ug/l			29.6J	6.8			2.37	2.5	0.74	1.7	0.85	1.4	0.44J		
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Bromobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Bromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Bromodichloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Bromoform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Bromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Carbon disulfide	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Carbon tetrachloride	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Chlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Chloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Chloroform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Chloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	cis-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	cis-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Dibromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Dibromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Dichlorodifluoromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Ethylbenzene	ug/l			142J	82.4			31	66	4.0	18	45J				
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Hexachlorobutadiene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Isopropylbenzene	ug/l				9.64											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	m,p-Xylene	ug/l				95.2				190	2.6	23	120J				
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Methylene chloride	ug/l				5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Naphthalene	ug/l				106											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	n-Butylbenzene	ug/l				30.4											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	n-Propylbenzene	ug/l				24.4											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	o-Xylene	ug/l				155				120	2.7	25	110JD				
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	sec-Butylbenzene	ug/l				5.6											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Styrene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	tert-Butylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Tetrachloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Toluene	ug/l			753J	294			66.5	120	0.17J	14	38J				
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	trans-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	trans-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Trichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Trichlorofluoromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Vinyl chloride	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-290	VOA	Xylenes	ug/l			504J				77.8	310	5.3	48	230JD				
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	TPH	TPH-Diesel	ug/l			9050												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	TPH	TPH-Gasoline	ug/l			2620												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,1,1,2-Tetrachloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,1,1-Trichloroethane	ug/l				1.57											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,1,2,2-Tetrachloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,1,2-Trichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,1-Dichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,1-Dichloroethene	ug/l				1U											

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Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,1-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,2,3-Trichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,2,3-Trichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,2,4-Trichlorobenzene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,2,4-Trimethylbenzene	ug/l				95.6											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,2-Dibromo-3-chloropropane	ug/l				2.5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,2-Dibromoethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,2-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,2-Dichloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,2-Dichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,3,5-Trimethylbenzene	ug/l				48											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,3-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,3-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,4-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	2,2-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	2-Butanone	ug/l				50U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	2-Chloroethyl vinyl ether	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	2-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	2-Hexanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	4-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	4-Isopropyltoluene	ug/l				5.57											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	4-Methyl-2-pentanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Benzene	ug/l			20.6	36.6											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Bromobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Bromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Bromodichloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Bromoform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Bromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Carbon disulfide	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Carbon tetrachloride	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Chlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Chloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Chloroform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Chloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	cis-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	cis-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Dibromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Dibromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Dichlorodifluoromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Ethylbenzene	ug/l			74.1	58.8											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Hexachlorobutadiene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Isopropylbenzene	ug/l				4.57											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	m,p-Xylene	ug/l				189											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Methylene chloride	ug/l				5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Naphthalene	ug/l				85.8											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	n-Butylbenzene	ug/l				13.3											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	n-Propylbenzene	ug/l				10.9											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	o-Xylene	ug/l				138											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	sec-Butylbenzene	ug/l				2.81											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Styrene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	tert-Butylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Tetrachloroethene	ug/l				1.12											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Toluene	ug/l			649	539											

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Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	trans-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	trans-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Trichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Trichlorofluoromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Vinyl chloride	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	Xylenes	ug/l			374												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	TPH	TPH-Diesel	ug/l			4670												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	TPH	TPH-Gasoline	ug/l			190												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,1,1,2-Tetrachloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,1,1-Trichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,1,2,2-Tetrachloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,1,2-Trichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,1-Dichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,1-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,1-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,2,3-Trichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,2,3-Trichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,2,4-Trichlorobenzene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,2,4-Trimethylbenzene	ug/l				17.9											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,2-Dibromo-3-chloropropane	ug/l				2.5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,2-Dibromoethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,2-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,2-Dichloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,2-Dichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,3,5-Trimethylbenzene	ug/l				19.8											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,3-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,3-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	1,4-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	2,2-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	2-Butanone	ug/l				50U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	2-Chloroethyl vinyl ether	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	2-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	2-Hexanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	4-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	4-Isopropyltoluene	ug/l				1.51											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	4-Methyl-2-pentanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Benzene	ug/l			6.93	1.12											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Bromobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Bromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Bromodichloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Bromoform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Bromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Carbon disulfide	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Carbon tetrachloride	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Chlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Chloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Chloroform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Chloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	cis-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	cis-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Dibromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Dibromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Dichlorodifluoromethane	ug/l				1U											

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Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Ethylbenzene	ug/l			8.57	1.84											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Hexachlorobutadiene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Isopropylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	m,p-Xylene	ug/l				9.72											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Methylene chloride	ug/l				5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Naphthalene	ug/l				6.19											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	n-Butylbenzene	ug/l				3.06											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	n-Propylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	o-Xylene	ug/l				22.2											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	sec-Butylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Styrene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	tert-Butylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Tetrachloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Toluene	ug/l			3.4	1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	trans-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	trans-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Trichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Trichlorofluoromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Vinyl chloride	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-303	VOA	Xylenes	ug/l			25.1												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	TPH	TPH-Diesel	ug/l			9580												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	TPH	TPH-Gasoline	ug/l			596J												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,1,1,2-Tetrachloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,1,1-Trichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,1,2,2-Tetrachloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,1,2-Trichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,1-Dichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,1-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,1-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,2,3-Trichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,2,3-Trichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,2,4-Trichlorobenzene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,2,4-Trimethylbenzene	ug/l				12.1											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,2-Dibromo-3-chloropropane	ug/l				2.5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,2-Dibromoethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,2-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,2-Dichloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,2-Dichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,3,5-Trimethylbenzene	ug/l				2.77											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,3-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,3-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	1,4-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	2,2-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	2-Butanone	ug/l				50U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	2-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	2-Hexanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	4-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	4-Isopropyltoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	4-Methyl-2-pentanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Benzene	ug/l			17.4	1.18											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Bromobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Bromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Bromodichloromethane	ug/l				1U											

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Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Bromoform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Bromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Carbon disulfide	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Carbon tetrachloride	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Chlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Chloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Chloroform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Chloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	cis-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	cis-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Dibromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Dibromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Dichlorodifluoromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Ethylbenzene	ug/l			43.1	3											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Hexachlorobutadiene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Isopropylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	m,p-Xylene	ug/l				5.43											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Methylene chloride	ug/l				5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Naphthalene	ug/l				6.09											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	n-Butylbenzene	ug/l				1.41											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	n-Propylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	o-Xylene	ug/l				2.45											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	sec-Butylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Styrene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	tert-Butylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Tetrachloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Toluene	ug/l			8.19	1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	trans-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	trans-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Trichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Trichlorofluoromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Vinyl chloride	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-304	VOA	Xylenes	ug/l			93.3												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-306	TPH	TPH-Diesel	ug/l							2500J			5200Y	4400Y	4300Y	7200Y	4700Y	4000Y
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-306	TPH	TPH-Gasoline	ug/l							1460			1800Y	1700Y	1500Y	1200H	670Y	
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-306	VOA	Benzene	ug/l							2.72J			1.9	2.8	1.5	1.3		
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-306	VOA	Ethylbenzene	ug/l							64.4J			56D	64				
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-306	VOA	Toluene	ug/l							196J			81D	46				
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-306	VOA	m,p-Xylene	ug/l										210D	260D				
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-306	VOA	o-Xylene	ug/l										140D	180D				
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-306	VOA	Xylenes	ug/l							292J			350D	440D				
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-310	TPH	TPH-Diesel	ug/l			609J												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-310	TPH	TPH-Gasoline	ug/l			90.7												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-310	VOA	Benzene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-310	VOA	Ethylbenzene	ug/l			5.64												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-310	VOA	Toluene	ug/l			0.5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-310	VOA	Xylenes	ug/l			11.3												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-313	TPH	TPH-Diesel	ug/l			100UJ												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-313	TPH	TPH-Gasoline	ug/l			50U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-313	VOA	Benzene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-313	VOA	Ethylbenzene	ug/l			0.5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-313	VOA	Toluene	ug/l			0.5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-313	VOA	Xylenes	ug/l			1U												

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-314	TPH	TPH-Diesel	ug/l			100U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-314	TPH	TPH-Gasoline	ug/l			50U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-314	VOA	Benzene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-314	VOA	Ethylbenzene	ug/l			0.5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-314	VOA	Toluene	ug/l			0.5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-314	VOA	Xylenes	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	TPH	TPH-Diesel	ug/l			9220												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	TPH	TPH-Gasoline	ug/l			1620J												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,1,1,2-Tetrachloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,1,1-Trichloroethane	ug/l				1.26											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,1,2,2-Tetrachloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,1,2-Trichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,1-Dichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,1-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,1-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,2,3-Trichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,2,3-Trichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,2,4-Trichlorobenzene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,2,4-Trimethylbenzene	ug/l				129											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,2-Dibromo-3-chloropropane	ug/l				2.5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,2-Dibromoethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,2-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,2-Dichloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,2-Dichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,3,5-Trimethylbenzene	ug/l				27.5											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,3-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,3-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	1,4-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	2,2-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	2-Butanone	ug/l				59.4											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	2-Chloroethyl vinyl ether	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	2-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	2-Hexanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	4-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	4-Isopropyltoluene	ug/l				4.8											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	4-Methyl-2-pentanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Benzene	ug/l			44.3	43.6											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Bromobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Bromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Bromodichloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Bromoform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Bromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Carbon disulfide	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Carbon tetrachloride	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Chlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Chloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Chloroform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Chloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	cis-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	cis-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Dibromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Dibromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Dichlorodifluoromethane	ug/l				1U											

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Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Ethylbenzene	ug/l			62.8	85.4											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Hexachlorobutadiene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Isopropylbenzene	ug/l				7											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	m,p-Xylene	ug/l				183											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Methylene chloride	ug/l				5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Naphthalene	ug/l				92.2											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	n-Butylbenzene	ug/l				17.5											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	n-Propylbenzene	ug/l				16.1											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	o-Xylene	ug/l				130											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	sec-Butylbenzene	ug/l				3.96											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Styrene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	tert-Butylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Tetrachloroethene	ug/l				1.24											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Toluene	ug/l			431	535											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	trans-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	trans-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Trichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Trichlorofluoromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Vinyl chloride	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-317	VOA	Xylenes	ug/l			224												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Acenaphthene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Acenaphthylene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Anthracene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Benzo(a)anthracene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Benzo(a)pyrene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Benzo(b)fluoranthene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Benzo(g,h,i)perylene	ug/l			0.1UJ												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Benzo(k)fluoranthene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Chrysene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Dibenz(a,h)anthracene	ug/l			0.1UJ												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Fluoranthene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Fluorene	ug/l			0.115												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Indeno(1,2,3-cd)pyrene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Naphthalene	ug/l			2.12												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Phenanthrene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	SVOA	Pyrene	ug/l			0.1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	TPH	C10-C24 Aliphatics	ug/l	100U	82UJ													
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	TPH	C10-C24 Aromatics	ug/l	200	640J													
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	TPH	C25-C36 Aliphatics	ug/l	100U	62UJ													
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	TPH	C25-C36 Aromatics	ug/l	100U	82UJ													
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	TPH	C6-C9 Aliphatics	ug/l	20UJ	22													
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	TPH	C6-C9 Aromatics	ug/l	51J	94													
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	TPH	TPH-Diesel	ug/l	160	640J	2620J	2600	1000	2520	2850	1100	180Y	120Y	100YJ	97U	98Y	280Y	55H
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	TPH	TPH-Gasoline	ug/l	56J	110	132	570	160	619	345	82	100U	100U		100U		100U	
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	TPH	TPH-Heavy Fraction/Oil	ug/l				250J											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,1,1,2-Tetrachloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,1,1-Trichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,1,2,2-Tetrachloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,1,2-Trichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,1-Dichloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,1-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,1-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,2,3-Trichlorobenzene	ug/l				1U											

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Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,2,3-Trichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,2,4-Trichlorobenzene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,2,4-Trimethylbenzene	ug/l				10.2											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,2-Dibromo-3-chloropropane	ug/l				2.5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,2-Dibromoethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,2-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,2-Dichloroethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,2-Dichloropropane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,3,5-Trimethylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,3-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,3-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	1,4-Dichlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	2,2-Dichloropropane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	2-Butanone	ug/l				50U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	2-Chloroethyl vinyl ether	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	2-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	2-Hexanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	4-Chlorotoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	4-Isopropyltoluene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	4-Methyl-2-pentanone	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Benzene	ug/l	9.9J	9.9	13.3	10.4	3.3	0.56	0.54	2.1	0.15J	0.50U		0.13J			
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Bromobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Bromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Bromodichloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Bromoform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Bromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	BTEX (total)	ug/l	16.3														
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Carbon disulfide	ug/l				10U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Carbon tetrachloride	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Chlorobenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Chloroethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Chloroform	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Chloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	cis-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	cis-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Dibromochloromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Dibromomethane	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Dichlorodifluoromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Ethylbenzene	ug/l	2.4	5.3UJ	7.9	3.14	8.3	29.4	20	8.3	0.30J	0.50U					
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Hexachlorobutadiene	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Isopropylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	m,p-Xylene	ug/l	1.5J	1.7		2U	4.6			5.6	0.50U	0.50U					
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Methylene chloride	ug/l				5U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Naphthalene	ug/l				3.86											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	n-Butylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	n-Propylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	o-Xylene	ug/l	1.9J	12		2.75	5.2			3.8	0.50U	0.50U					
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	sec-Butylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Styrene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	tert-Butylbenzene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Tetrachloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Toluene	ug/l	0.3U	0.3U	1.51	22	2U	1.74	4.2	1.0U	0.50U	1.1U					

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	trans-1,2-Dichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	trans-1,3-Dichloropropene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Trichloroethene	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Trichlorofluoromethane	ug/l				1U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Vinyl chloride	ug/l				2U											
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Xylenes	ug/l			15.7J	130		72.6	56.6	9.4	1.0U	1.0U					
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	04-601	VOA	Xylenes (total)	ug/l	3.4							9.4	1.0U	1.0U					
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-01	TPH	TPH-Diesel	ug/l			240		73J	87.9J	250U	640	59Z	41J		50U			
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-01	TPH	TPH-Gasoline	ug/l			50U		11J	80U	80U	25U	100U	13J		19J			
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-01	VOA	Benzene	ug/l			0.2U		2U	0.5U	0.5U	1.0U	0.50U						
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-01	VOA	Ethylbenzene	ug/l			0.5U		2U	0.5U	0.5U	1.0U	0.50U						
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-01	VOA	m,p-Xylene	ug/l					2U			2.0U	0.50U						
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-01	VOA	Methyl Tert-Butyl Ether	ug/l					2U										
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-01	VOA	o-Xylene	ug/l					2U			1.0U	0.50U						
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-01	VOA	Toluene	ug/l			0.5U		2U	0.5U	0.5U	2.0	0.50U						
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-01	VOA	Xylenes	ug/l			1U			1U	0.37J	3.0U	1.0U						
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-03	TPH	TPH-Diesel	ug/l			153												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-03	TPH	TPH-Gasoline	ug/l			50U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-03	VOA	Benzene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-03	VOA	Ethylbenzene	ug/l			0.5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-03	VOA	Toluene	ug/l			0.5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-03	VOA	Xylenes	ug/l			1U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-04	TPH	TPH-Diesel	ug/l			488												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-04	TPH	TPH-Gasoline	ug/l			50U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-04	VOA	Benzene	ug/l			0.2U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-04	VOA	Ethylbenzene	ug/l			3.09												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-04	VOA	Toluene	ug/l			0.5U												
Tanker Shed, UST 42494	EAST RUNWAY AREA	WLM	TS-04	VOA	Xylenes	ug/l			8.88												
Tanker Shed, UST 42494	UST 42494 - TANKER SHED	WLM	TS-05	TPH	TPH-Diesel	ug/l								53U	27J	34J		49U			
Tanker Shed, UST 42494	UST 42494 - TANKER SHED	WLM	TS-05	TPH	TPH-Gasoline	ug/l								25U	100U	100U		100U			
Tanker Shed, UST 42494	UST 42494 - TANKER SHED	WLM	TS-05	VOA	Benzene	ug/l								1.0U	0.50U						
Tanker Shed, UST 42494	UST 42494 - TANKER SHED	WLM	TS-05	VOA	Ethylbenzene	ug/l								1.0U	0.50U						
Tanker Shed, UST 42494	UST 42494 - TANKER SHED	WLM	TS-05	VOA	Toluene	ug/l								1.0U	0.50U						
Tanker Shed, UST 42494	UST 42494 - TANKER SHED	WLM	TS-05	VOA	Xylenes	ug/l								3.0U	1.0U						
Tanker Shed, UST 42494	UST 42494 - TANKER SHED	WLM	TS-05	VOA	m,p-Xylene	ug/l								2.0U	0.50U						
Tanker Shed, UST 42494	UST 42494 - TANKER SHED	WLM	TS-05	VOA	o-Xylene	ug/l								1.0U	0.50U						

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	2-Methylnaphthalene	ug/l	0.10U	0.029	0.021	2.1	1.1	1.4	0.0063J	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Acenaphthene	ug/l	0.10U	0.020J	0.017J	0.55	0.43	0.41	0.0080J	0.029
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Acenaphthylene	ug/l	0.10U	0.020U	0.020U	0.083U	0.059U	0.062U	0.020U	0.0067JX
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Anthracene	ug/l	0.10U	0.020U	0.020U	0.027	0.023	0.027	0.020U	0.0096J
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Benzo(a)anthracene	ug/l	0.10U	0.020U	0.0065J	0.020U	0.020U	0.0034J	0.0036J	0.014J
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Benzo(a)pyrene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.014J
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Benzo(b)fluoranthene	ug/l	0.10U	0.020U	0.020U	0.0055J	0.020U	0.0039J	0.020U	0.023
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Benzo(g,h,i)perylene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.011J
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Benzo(k)fluoranthene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.0095J
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Chrysene	ug/l	0.10U	0.020U	0.020U	0.0062J	0.020U	0.0069J	0.020U	0.014J
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Dibenz(a,h)anthracene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.0026J
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Fluoranthene	ug/l	0.050J	0.020U	0.011J	0.028	0.020U	0.033	0.012J	0.044
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Fluorene	ug/l	0.19	0.055	0.043	1.3	0.97	1.0	0.015J	0.070
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.10U	0.020U	0.0017J	0.020U	0.020U	0.020U	0.020U	0.0097J
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Naphthalene	ug/l	0.15	0.081	0.073	1.8	1.9	1.6	0.012J	0.043
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Phenanthrene	ug/l	0.060J	0.021U	0.025	0.38	0.41	0.32	0.0090J	0.024
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Pyrene	ug/l	0.10U	0.0047J	0.0096J	0.032	0.014J	0.028	0.0088J	0.041
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	TPH	TPH-Diesel	ug/l	900	93Z	84J	1000Y	580Y	1200Y	130	63Y
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	TPH	TPH-Gasoline	ug/l	56	100U	100U	110H				
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	VOA	Benzene	ug/l	1.0U	0.16J	0.50U	0.49J	0.24J	0.25J	0.50U	0.50U
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	VOA	Ethylbenzene	ug/l	1.0U	0.32J	0.070J	1.3	0.55	0.68	0.50U	0.50U
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	VOA	Toluene	ug/l	1.0U	0.23J	0.70U	0.50U	0.20J	0.080J	0.50U	0.50U
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	VOA	m,p-Xylene	ug/l	2.0U	0.54	0.50U	0.66	0.11J	0.23J	0.50U	0.50U
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	VOA	o-Xylene	ug/l	1.0U	0.50U	0.50U	0.13J	0.50U	0.50U	0.50U	0.50U
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	VOA	Xylenes	ug/l	3.0U	0.54	1.0U	0.79J	0.11J	0.23J	1.0U	1.0U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	2-Methylnaphthalene	ug/l	0.096U	0.0099J	0.020U	0.021U	0.0037J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Acenaphthene	ug/l	0.096U	0.012J	0.0059J	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Acenaphthylene	ug/l	0.096U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Anthracene	ug/l	0.096U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Benzo(a)anthracene	ug/l	0.096U	0.0037J	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Benzo(a)pyrene	ug/l	0.096U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Benzo(b)fluoranthene	ug/l	0.096U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Benzo(g,h,i)perylene	ug/l	0.096U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Benzo(k)fluoranthene	ug/l	0.096U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Chrysene	ug/l	0.096U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Dibenz(a,h)anthracene	ug/l	0.096U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Fluoranthene	ug/l	0.096U	0.0098J	0.020U	0.0069J	0.0051J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Fluorene	ug/l	0.096U	0.012J	0.0058J	0.0028J	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.096U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Naphthalene	ug/l	0.11	0.064	0.050	0.010J	0.0070J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Phenanthrene	ug/l	0.096U	0.0083J	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Pyrene	ug/l	0.096U	0.0054J	0.020U	0.021U	0.0053J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	TPH	TPH-Diesel	ug/l	200	97U	81J	70U	140Y			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	TPH	TPH-Gasoline	ug/l	34	42J	21J	100U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	VOA	Benzene	ug/l	1.0U	0.48J	0.13J	0.50U	0.16J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	VOA	Ethylbenzene	ug/l	0.54J	0.94	0.17J	0.50U	0.32J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	VOA	Toluene	ug/l	1.0U	0.43J	0.54U	0.50U	0.53U			

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	2006	2007	2008	2009	2010	2011	2012	2013
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	VOA	m,p-Xylene	ug/l	1.7J	1.7	0.66	0.50U	0.8			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	VOA	o-Xylene	ug/l	1.0U	0.17J	0.070J	0.50U	0.50U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	VOA	Xylenes	ug/l	1.7J	1.87J	0.73J	1.0U	0.8			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	2-Methylnaphthalene	ug/l	0.099U	0.0031J	0.020U	0.046	0.0042J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Acenaphthene	ug/l	0.099U	0.0037J	0.020U	0.0075J	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Acenaphthylene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Anthracene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Benzo(a)anthracene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Benzo(a)pyrene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Benzo(b)fluoranthene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Benzo(g,h,i)perylene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Benzo(k)fluoranthene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Chrysene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Dibenz(a,h)anthracene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Fluoranthene	ug/l	0.099U	0.020U	0.020U	0.0056J	0.0050J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Fluorene	ug/l	0.099U	0.0046J	0.0027J	0.014J	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Naphthalene	ug/l	0.054J	0.031U	0.014J	0.25	0.014J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Phenanthrene	ug/l	0.099U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Pyrene	ug/l	0.099U	0.020U	0.020U	0.0046J	0.0045J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	TPH	TPH-Diesel	ug/l	260	29J	96U	180Y	110Y			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	TPH	TPH-Gasoline	ug/l	25U	100U	100U	32J				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	VOA	Benzene	ug/l	1.0U	0.50U	0.50U	0.37J	0.15J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	VOA	Ethylbenzene	ug/l	0.53J	0.50U	0.50U	0.68	0.33J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	VOA	Toluene	ug/l	1.0U	0.11J	0.51U	0.50U	0.50U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	VOA	m,p-Xylene	ug/l	1.3J	0.50U	0.50U	2.1	0.79			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	VOA	o-Xylene	ug/l	1.0U	0.50U	0.50U	0.17J	0.50U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	VOA	Xylenes	ug/l	1.3J	1.0U	1.0U	2.27J	0.79			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	2-Methylnaphthalene	ug/l	0.096U	0.0030J	0.020U	0.022	0.0029J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Acenaphthene	ug/l	0.096U	0.0043J	0.0053J	0.014J	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Acenaphthylene	ug/l	0.096U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Anthracene	ug/l	0.096U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Benzo(a)anthracene	ug/l	0.096U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Benzo(a)pyrene	ug/l	0.096U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Benzo(b)fluoranthene	ug/l	0.096U	0.020U	0.0049J	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Benzo(g,h,i)perylene	ug/l	0.096U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Benzo(k)fluoranthene	ug/l	0.096U	0.020U	0.0034J	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Chrysene	ug/l	0.096U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Dibenz(a,h)anthracene	ug/l	0.096U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Fluoranthene	ug/l	0.096U	0.020U	0.020U	0.0070J	0.0051J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Fluorene	ug/l	0.096U	0.0043J	0.0077J	0.019J	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.096U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Naphthalene	ug/l	0.091J	0.020U	0.061	0.14	0.0064J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Phenanthrene	ug/l	0.048J	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Pyrene	ug/l	0.096U	0.020U	0.020U	0.0061J	0.0050J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	TPH	TPH-Diesel	ug/l	160	38J	61J	140Y	120Y			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	TPH	TPH-Gasoline	ug/l	28	100U	100U	29J				

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	2006	2007	2008	2009	2010	2011	2012	2013
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	VOA	Benzene	ug/l	1.0U	0.50U	0.50U	0.42J	0.17J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	VOA	Ethylbenzene	ug/l	1.0U	0.50U	0.50U	0.58	0.28J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	VOA	Toluene	ug/l	1.0U	0.50U	0.62U	0.50U	0.50U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	VOA	m,p-Xylene	ug/l	1.3J	0.50U	0.50U	1.7	0.64			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	VOA	o-Xylene	ug/l	1.0U	0.50U	0.50U	0.13J	0.50U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	VOA	Xylenes	ug/l	1.3J	1.0U	1.0U	1.83J	0.64			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	2-Methylnaphthalene	ug/l	0.096U	0.013J	0.0033J	0.020U	0.021U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Acenaphthene	ug/l	0.096U	0.0070J	0.016J	0.020U	0.021U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Acenaphthylene	ug/l	0.096U	0.020U	0.020U	0.020U	0.021U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Anthracene	ug/l	0.096U	0.020U	0.020U	0.020U	0.021U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Benzo(a)anthracene	ug/l	0.096U	0.020U	0.020U	0.020U	0.0078J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Benzo(a)pyrene	ug/l	0.096U	0.020U	0.020U	0.020U	0.0047J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Benzo(b)fluoranthene	ug/l	0.096U	0.020U	0.020U	0.020U	0.0072J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Benzo(g,h,i)perylene	ug/l	0.096U	0.020U	0.020U	0.020U	0.0073J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Benzo(k)fluoranthene	ug/l	0.096U	0.020U	0.020U	0.020U	0.0040J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Chrysene	ug/l	0.096U	0.020U	0.020U	0.020U	0.0069J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Dibenz(a,h)anthracene	ug/l	0.096U	0.020U	0.020U	0.020U	0.0047J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Fluoranthene	ug/l	0.096U	0.020U	0.011J	0.0065J	0.0080J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Fluorene	ug/l	0.096U	0.0092J	0.018J	0.0031J	0.021U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.096U	0.020U	0.020U	0.020U	0.0065J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Naphthalene	ug/l	0.19	0.075	0.055	0.019J	0.021U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Phenanthrene	ug/l	0.096U	0.020U	0.020U	0.020U	0.021U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Pyrene	ug/l	0.096U	0.0047J	0.0086J	0.0050J	0.011J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	TPH	TPH-Diesel	ug/l	63	73Z	120Z	74Y	77YJ			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	TPH	TPH-Gasoline	ug/l	25U	100U	31J	100U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	VOA	Benzene	ug/l	1.0U	0.42J	0.51	0.50U	0.15J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	VOA	Ethylbenzene	ug/l	1.0U	0.80	0.60	0.50U	0.26J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	VOA	Toluene	ug/l	1.0U	0.42J	0.81 U	0.50U	0.50U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	VOA	m,p-Xylene	ug/l	1.1J	1.7	1.5	0.50U	0.52			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	VOA	o-Xylene	ug/l	1.0U	0.15J	0.14J	0.50U	0.50U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	VOA	Xylenes	ug/l	1.1J	1.85J	1.64J	1.0U	0.52			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	2-Methylnaphthalene	ug/l	0.097U	0.013J	0.0035J	0.015J	0.0026J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Acenaphthene	ug/l	0.097U	0.0089J	0.0086J	0.011J	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Acenaphthylene	ug/l	0.097U	0.020U	0.0035J	0.0028J	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Anthracene	ug/l	0.097U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Benzo(a)anthracene	ug/l	0.097U	0.0031J	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Benzo(a)pyrene	ug/l	0.097U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Benzo(b)fluoranthene	ug/l	0.097U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Benzo(g,h,i)perylene	ug/l	0.097U	0.020U	0.0022J	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Benzo(k)fluoranthene	ug/l	0.097U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Chrysene	ug/l	0.097U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Dibenz(a,h)anthracene	ug/l	0.097U	0.020U	0.020U	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Fluoranthene	ug/l	0.097U	0.020U	0.013J	0.0064J	0.0055J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Fluorene	ug/l	0.097U	0.016J	0.0088J	0.018J	0.0067J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.097U	0.020U	0.0025J	0.020U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Naphthalene	ug/l	0.12	0.058	0.048	0.12	0.0046J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Phenanthrene	ug/l	0.053J	0.020U	0.020U	0.020U	0.020U			

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South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Pyrene	ug/l	0.097U	0.0058J	0.0070J	0.0057J	0.0059J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	TPH	TPH-Diesel	ug/l	190	93Z	85J	120Y	98Y			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	TPH	TPH-Gasoline	ug/l	30	29J	16J	35J				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	VOA	Benzene	ug/l	1.0U	0.21J	0.11J	0.16J	0.13J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	VOA	Ethylbenzene	ug/l	1.0U	0.40J	0.17J	0.38J	0.27J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	VOA	Toluene	ug/l	1.0U	0.26J	1U	0.50U	0.50U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	VOA	m,p-Xylene	ug/l	1.1J	0.87	0.55	0.76	0.52			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	VOA	o-Xylene	ug/l	1.0U	0.50U	0.50U	0.50U	0.50U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	VOA	Xylenes	ug/l	1.1J	0.87	0.55	0.76	0.52			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	2-Methylnaphthalene	ug/l	0.099U	0.0093J	0.020U	0.021U	0.021			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Acenaphthene	ug/l	0.099U	0.0052J	0.020U	0.027	0.021			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Acenaphthylene	ug/l	0.099U	0.020U	0.020U	0.021U	0.0050J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Anthracene	ug/l	0.099U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Benzo(a)anthracene	ug/l	0.099U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Benzo(a)pyrene	ug/l	0.099U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Benzo(b)fluoranthene	ug/l	0.099U	0.020U	0.020U	0.0031J	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Benzo(g,h,i)perylene	ug/l	0.099U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Benzo(k)fluoranthene	ug/l	0.099U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Chrysene	ug/l	0.099U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Dibenz(a,h)anthracene	ug/l	0.099U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Fluoranthene	ug/l	0.099U	0.020U	0.0036J	0.011J	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Fluorene	ug/l	0.099U	0.0063J	0.020U	0.017J	0.017J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.099U	0.020U	0.020U	0.021U	0.020U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Naphthalene	ug/l	0.13J	0.039	0.020U	0.049	0.13B			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Phenanthrene	ug/l	0.099U	0.020U	0.020U	0.021U	0.011J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Pyrene	ug/l	0.099U	0.0045J	0.020U	0.010J	0.0073J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	TPH	TPH-Diesel	ug/l	170	63Z	27J	60U	120Y			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	TPH	TPH-Gasoline	ug/l	30	100U	100U	100U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	VOA	Benzene	ug/l	1.0U	0.18J	0.50U	0.070J	0.25J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	VOA	Ethylbenzene	ug/l	1.0U	0.32J	0.50U	0.50U	0.35J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	VOA	Toluene	ug/l	1.0U	0.18J	0.50U	0.50U	0.30J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	VOA	m,p-Xylene	ug/l	1.3J	0.62	0.50U	0.50U	1.2			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	VOA	o-Xylene	ug/l	1.0U	0.50U	0.50U	0.50U	0.090J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	VOA	Xylenes	ug/l	1.3J	0.62	1.0U	1.0U	1.29J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	2-Methylnaphthalene	ug/l	0.098U	0.0083J	0.0027J	0.020U	0.021	0.023	0.0077J	0.030
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Acenaphthene	ug/l	0.098U	0.0041J	0.020U	0.023	0.024	0.021	0.015J	0.026
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Acenaphthylene	ug/l	0.098U	0.020U	0.020U	0.020U	0.0054J	0.020U	0.021U	0.0053J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Anthracene	ug/l	0.098U	0.020U	0.020U	0.020U	0.020U	0.020U	0.021U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Benzo(a)anthracene	ug/l	0.098U	0.020U	0.020U	0.020U	0.020U	0.020U	0.0035J	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Benzo(a)pyrene	ug/l	0.098U	0.020U	0.020U	0.020U	0.020U	0.020U	0.021U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Benzo(b)fluoranthene	ug/l	0.098U	0.020U	0.020U	0.020U	0.020U	0.020U	0.021U	0.0034J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Benzo(g,h,i)perylene	ug/l	0.098U	0.020U	0.020U	0.020U	0.020U	0.020U	0.021U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Benzo(k)fluoranthene	ug/l	0.098U	0.020U	0.020U	0.020U	0.020U	0.020U	0.021U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Chrysene	ug/l	0.098U	0.020U	0.020U	0.020U	0.020U	0.020U	0.021U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Dibenz(a,h)anthracene	ug/l	0.098U	0.020U	0.020U	0.020U	0.020U	0.020U	0.021U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Fluoranthene	ug/l	0.098U	0.020U	0.0048J	0.011J	0.020U	0.0088J	0.011J	0.018J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Fluorene	ug/l	0.098U	0.0058J	0.020U	0.016J	0.016J	0.016J	0.010J	0.021

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South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.098U	0.020U	0.020U	0.020U	0.020U	0.020U	0.021U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Naphthalene	ug/l	0.13	0.037U	0.020U	0.059	0.13B	0.13	0.029	0.16
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Phenanthrene	ug/l	0.098U	0.020U	0.020U	0.020U	0.010J	0.0090J	0.0089J	0.019J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Pyrene	ug/l	0.098U	0.0034J	0.020U	0.010J	0.0064J	0.0054J	0.021U	0.014J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	TPH	TPH-Diesel	ug/l	170	46J	14J	96Y	100U	170Y	49U	110Y
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	TPH	TPH-Gasoline	ug/l	25U	100U	100U	100U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	VOA	Benzene	ug/l	1.0U	0.50U	0.50U	0.080J	0.22J	0.20J	0.37J	0.25J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	VOA	Ethylbenzene	ug/l	1.0U	0.22J	0.50U	0.070J	0.34J	0.44J	0.060J	0.53
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	VOA	Toluene	ug/l	1.0U	0.13J	0.85U	0.50U	0.38J	0.21J	0.50U	0.17J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	VOA	m,p-Xylene	ug/l	0.96J	0.36J	0.50U	0.16J	1.2	0.89	0.50U	1.0
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	VOA	o-Xylene	ug/l	1.0U	0.50U	0.50U	0.50U	0.090J	0.080J	0.50U	0.080J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	VOA	Xylenes	ug/l	0.96J	0.36J	1.0U	0.16J	1.29J	0.97J	1.0U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	2-Methylnaphthalene	ug/l	0.10U	0.0035J	0.020U	0.019J	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Acenaphthene	ug/l	0.10U	0.0045J	0.020U	0.011J	0.0054J	0.020U	0.020U	0.0053J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Acenaphthylene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Anthracene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Benzo(a)anthracene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.0047J	0.0036JX
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Benzo(a)pyrene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Benzo(b)fluoranthene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.0036J	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Benzo(g,h,i)perylene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Benzo(k)fluoranthene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Chrysene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Dibenz(a,h)anthracene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Fluoranthene	ug/l	0.10U	0.0042J	0.020U	0.010J	0.020U	0.011J	0.015J	0.0046J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Fluorene	ug/l	0.10U	0.0037J	0.0041J	0.024	0.020U	0.020U	0.0039J	0.0058J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.10U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Naphthalene	ug/l	0.10U	0.020U	0.032	0.14	0.020U	0.011J	0.0050J	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Phenanthrene	ug/l	0.10U	0.0044J	0.020U	0.020U	0.020U	0.020U	0.013J	0.020U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Pyrene	ug/l	0.10U	0.0037J	0.020U	0.0088J	0.020U	0.0060J	0.020U	0.0041J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	TPH	TPH-Diesel	ug/l	49	49U	130Y	180Y	50U	78U	50U	29J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	TPH	TPH-Gasoline	ug/l	25U	100U	24J	44J				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	VOA	Benzene	ug/l	1.0U	0.50U	0.23J	0.51	0.50U	0.50U	0.50U	0.50U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	VOA	Ethylbenzene	ug/l	1.0U	0.50U	0.26J	0.93	0.50U	0.50U	0.50U	0.50U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	VOA	Toluene	ug/l	1.0U	0.11J	0.50U	0.50U	0.12J	0.50U	0.50U	0.50U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	VOA	m,p-Xylene	ug/l	2.0U	0.50U	1.1	2.8	0.50U	0.50U	0.50U	0.50U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	VOA	o-Xylene	ug/l	1.0U	0.50U	0.11J	0.22J	0.50U	0.50U	0.50U	0.50U
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	VOA	Xylenes	ug/l	3.0U	1.0U	1.21J	3.02J	1.0U	1.0U	1.0U	1.0U
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	2-Methylnaphthalene	ug/l		0.0050J						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Acenaphthene	ug/l		0.0075J						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Acenaphthylene	ug/l		0.020U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Anthracene	ug/l		0.020U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Benzo(a)anthracene	ug/l		0.020U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Benzo(a)pyrene	ug/l		0.020U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Benzo(b)fluoranthene	ug/l		0.020U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Benzo(g,h,i)perylene	ug/l		0.020U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Benzo(k)fluoranthene	ug/l		0.020U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Chrysene	ug/l		0.020U						

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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Dibenz(a,h)anthracene	ug/l		0.020U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Fluoranthene	ug/l		0.0041J						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Fluorene	ug/l		0.0090J						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Indeno(1,2,3-cd)pyrene	ug/l		0.020U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Naphthalene	ug/l		0.020U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Phenanthrene	ug/l		0.0052J						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	SVOA	Pyrene	ug/l		0.0030J						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	TPH	TPH-Diesel	ug/l		49U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	Benzene	ug/l		0.50U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	Ethylbenzene	ug/l		0.14J						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	m,p-Xylene	ug/l		0.22J						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	o-Xylene	ug/l		0.50U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	Toluene	ug/l		0.15J						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	Xylenes	ug/l		0.22J						
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	2-Methylnaphthalene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.0026J	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Acenaphthene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Acenaphthylene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Anthracene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Benzo(a)anthracene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Benzo(a)pyrene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Benzo(b)fluoranthene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Benzo(g,h,i)perylene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Benzo(k)fluoranthene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Chrysene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Dibenz(a,h)anthracene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Fluoranthene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Fluorene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Indeno(1,2,3-cd)pyrene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Naphthalene	ug/l		0.020U	0.020 U	0.048	0.20U	0.0056J	0.035	0.024U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Phenanthrene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	SVOA	Pyrene	ug/l		0.020U	0.020 U	0.019U	0.20U	0.020U	0.021U	0.020U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	TPH	TPH-Diesel	ug/l				56U	50U	30J		
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	TPH	TPH-Gasoline	ug/l		100U	100U	100U	16J	100U	100U	100U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Benzene	ug/l		0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Ethylbenzene	ug/l		0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	m,p-Xylene	ug/l		0.36J	0.23J	0.50U	0.13J	0.51	0.21J	0.17J
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	o-Xylene	ug/l		0.50U	0.50U	0.50U	0.50U	0.50U	0.50U	0.50U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Toluene	ug/l		0.50U	1.4U	0.50U	0.22J	0.080J	0.99	0.50U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Xylenes	ug/l		0.36J	0.23J	1.0U	0.13J	0.51	0.21J	0.17J
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RV	NL-07	TPH	TPH-Diesel	ug/l				86Y				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	2-Methylnaphthalene	ug/l				0.022U		0.0024J	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Acenaphthene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Acenaphthylene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Anthracene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Benzo(a)anthracene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Benzo(a)pyrene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Benzo(b)fluoranthene	ug/l				0.022U		0.020U	0.020U	

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SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Benzo(g,h,i)perylene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Benzo(k)fluoranthene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Chrysene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Dibenz(a,h)anthracene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Fluoranthene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Fluorene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Indeno(1,2,3-cd)pyrene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Naphthalene	ug/l				0.022U		0.0043J	0.039	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Phenanthrene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	SVOA	Pyrene	ug/l				0.022U		0.020U	0.020U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	TPH	TPH-Diesel	ug/l				150U		29J		
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	TPH	TPH-Gasoline	ug/l				26J		100U	100U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	Benzene	ug/l				0.50U		0.50U	0.50U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	Ethylbenzene	ug/l				0.50U		0.50U	0.50U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	m,p-Xylene	ug/l				0.50U		0.41J	0.19J	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	o-Xylene	ug/l				0.50U		0.50U	0.50U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	Toluene	ug/l				0.50U		0.12J	0.51U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	Xylenes	ug/l				1.0U		0.41J	0.19J	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	2-Methylnaphthalene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Acenaphthene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Acenaphthylene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Anthracene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Benzo(a)anthracene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Benzo(a)pyrene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Benzo(b)fluoranthene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Benzo(g,h,i)perylene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Benzo(k)fluoranthene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Chrysene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Dibenz(a,h)anthracene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Fluoranthene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Fluorene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Indeno(1,2,3-cd)pyrene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Naphthalene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Phenanthrene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	SVOA	Pyrene	ug/l				0.020U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	TPH	TPH-Diesel	ug/l				49U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	TPH	TPH-Gasoline	ug/l				100U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	Benzene	ug/l				0.50U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	Ethylbenzene	ug/l				0.50U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	m,p-Xylene	ug/l				0.50U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	o-Xylene	ug/l				0.50U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	Toluene	ug/l				0.50U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	Xylenes	ug/l				1.0U				
Former Power Plant, Building T-1451			NL-08	VOA	Benzene	ug/l					1.3	1.5	0.86	0.28J
Former Power Plant, Building T-1451			NL-08	VOA	Ethylbenzene	ug/l					2	2.3	1.3	0.45J
Former Power Plant, Building T-1451			NL-08	VOA	m,p-Xylene	ug/l					1.7	2.1	1.1	0.55U
Former Power Plant, Building T-1451			NL-08	VOA	o-Xylene	ug/l					0.29J	0.37J	0.17J	0.12J

Summary of Surface Water Analytical Results 2006 through 2013
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Former Naval Complex, Adak, Alaska

Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	2006	2007	2008	2009	2010	2011	2012	2013
Former Power Plant, Building T-1451			NL-08	VOA	Toluene	ug/l					0.89	1.1	0.77UJ	0.27J
Former Power Plant, Building T-1451			NL-08	VOA	Xylenes	ug/l					1.99J	2.5J	1.27J	0.12J
Former Power Plant, Building T-1451			NL-08	SVOA	2-Methylnaphthalene	ug/l					0.0031J	0.020	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Acenaphthene	ug/l					0.020U	0.0049J	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Acenaphthylene	ug/l					0.020U	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Anthracene	ug/l					0.020U	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(a)anthracene	ug/l					0.020U	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(a)pyrene	ug/l					0.020U	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(b)fluoranthene	ug/l					0.020U	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(g,h,i)perylene	ug/l					0.020U	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(k)fluoranthene	ug/l					0.020U	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Chrysene	ug/l					0.020U	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Dibenz(a,h)anthracene	ug/l					0.020U	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Fluoranthene	ug/l					0.020U	0.0046J	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Fluorene	ug/l					0.0041J	0.018J	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Indeno(1,2,3-cd)pyrene	ug/l					0.020U	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Naphthalene	ug/l					0.058U	0.064	0.0083J	0.0095J
Former Power Plant, Building T-1451			NL-08	SVOA	Phenanthrene	ug/l					0.020U	0.012J	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Pyrene	ug/l					0.0075J	0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	TPH	TPH-Diesel	ug/l					240Y	130Y	160YJ	
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Benzene	ug/l					1.1	1.1	0.96	0.74
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Ethylbenzene	ug/l					13	15	8.8	8.0
SWMU 62, New Housing Fuel Leak			NL-09	VOA	m,p-Xylene	ug/l					9.1	9.2	6.0	5.9
SWMU 62, New Housing Fuel Leak			NL-09	VOA	o-Xylene	ug/l					1.4	3.8	1.0	0.96
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Toluene	ug/l					4.4	6.9	4.5	2.9
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Xylenes	ug/l					10.5	13	7.0	6.86
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	2-Methylnaphthalene	ug/l					0.032	0.062	0.023	0.027
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Acenaphthene	ug/l					0.013J	0.035	0.0099J	0.023
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Acenaphthylene	ug/l					0.0070J	0.021U	0.0094J	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Anthracene	ug/l					0.020U	0.021U	0.020U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(a)anthracene	ug/l					0.020U	0.021U	0.020U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(a)pyrene	ug/l					0.020U	0.021U	0.020U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(b)fluoranthene	ug/l					0.020U	0.021U	0.020U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(g,h,i)perylene	ug/l					0.020U	0.021U	0.020U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(k)fluoranthene	ug/l					0.020U	0.021U	0.020U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Chrysene	ug/l					0.020U	0.021U	0.020U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Dibenz(a,h)anthracene	ug/l					0.020U	0.021U	0.020U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Fluoranthene	ug/l					0.0087J	0.0047J	0.0050J	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Fluorene	ug/l					0.027	0.12	0.023	0.056
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Indeno(1,2,3-cd)pyrene	ug/l					0.020U	0.021U	0.020U	0.020UJ
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Naphthalene	ug/l					0.14	0.53	0.14	0.25X
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Phenanthrene	ug/l					0.015J	0.035	0.0086J	0.013J
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Pyrene	ug/l					0.0087J	0.0072J	0.0074J	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	TPH	TPH-Diesel	ug/l					280J	1500Y	110Y	390Y
SWMU 62, New Housing Fuel Leak			NL-09	TPH	TPH-Gasoline	ug/l					230Y	260Y	150Y	130Y

Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	2-Methylnaphthalene	ug/kg	6.8J	14	5.5U	20	190	41	13JD	6.4
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Acenaphthene	ug/kg	4.2J	63	58J	130	64	26	110D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Acenaphthylene	ug/kg	8.7U	41U	41U	30U	13U	10U	69D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Anthracene	ug/kg	12	28	40J	49U	3.7U	4.3U	420U	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Benzo(a)anthracene	ug/kg	17J	27	50J	46	11	9.9	33D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Benzo(a)pyrene	ug/kg	12	28	22J	23	11	12	16JD	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Benzo(b)fluoranthene	ug/kg	25	44	69	63	29	23	90D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Benzo(g,h,i)perylene	ug/kg	8.7U	33	23	29	14	13	48D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Benzo(k)fluoranthene	ug/kg	9.7	12	25	14	7.9	7.7	28JD	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Chrysene	ug/kg	34J	44	180J	30	13	17	52D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Dibenz(a,h)anthracene	ug/kg	8.7U	7.3	5.9J	5.1	2.7J	4.3U	20JD	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Fluoranthene	ug/kg	27	130	470J	130	75	33	220D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Fluorene	ug/kg	6.8J	340	330J	93	240	120	390D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg	8.7U	29	25J	27	15	12	51D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Naphthalene	ug/kg	5.8J	58	36J	46	49	26	54D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Phenanthrene	ug/kg	31	600	81J	120U	160	130	470U	22U
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	SVOA	Pyrene	ug/kg	55J	94	600J	200	110	44	420D	
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	TPH	TPH-Diesel	ug/kg	260000J	1300000DY	500000YJ	2900000Y	4100000DY	1400000DY	10000000DY	2000000Y
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	TPH	TPH-Gasoline	ug/kg	880U	6600J	1800J	7100U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	2-Methylnaphthalene	ug/kg	48U	0.88J	8.6	23JD	11			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Acenaphthene	ug/kg	48UJ	0.53J	4.7J	240U	1.5JX			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Acenaphthylene	ug/kg	48UJ	0.31J	5.5	37U	3.1U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Anthracene	ug/kg	48U	3.1J	16	320U	44U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Benzo(a)anthracene	ug/kg	20J	3.2J	17	29	4.0			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Benzo(a)pyrene	ug/kg	48UJ	4.4J	52	14	23			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Benzo(b)fluoranthene	ug/kg	25J	7.1J	38	38	32			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Benzo(g,h,i)perylene	ug/kg	48U	9.2	120	14	19			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Benzo(k)fluoranthene	ug/kg	23UJ	2.5J	11	8.6	9.4			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Chrysene	ug/kg	22UJ	4.4J	32	46	18			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Dibenz(a,h)anthracene	ug/kg	48U	1.4J	26	4.1	4.2			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Fluoranthene	ug/kg	31J	9.4J	41	250D	24			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Fluorene	ug/kg	48UJ	0.49J	6.2	110U	8.3U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg	48U	6.9	71	12	20			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Naphthalene	ug/kg	48U	2.8UJ	14	37U	3.1U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Phenanthrene	ug/kg	31J	6.0J	31	570U	36U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	SVOA	Pyrene	ug/kg	40J	7.5J	48	230	50			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	TPH	TPH-Diesel	ug/kg	330000J	280000Y	22000HJ	14000000YH	1800000Y			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-1	TPH	TPH-Gasoline	ug/kg	910U	1900U	6900U	4400U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	2-Methylnaphthalene	ug/kg	48U	3.2	9.4	140JD	2.7J	4.2	0.89J	2.3J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Acenaphthene	ug/kg	48UJ	2.6U	2.1J	350U	1.9JX	9.6	3.4U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Acenaphthylene	ug/kg	48UJ	2.6U	4.9U	71U	3.2U	3.4U	3.4U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Anthracene	ug/kg	48U	7.3U	28U	470U	71U	27	3.4U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Benzo(a)anthracene	ug/kg	48UJ	4.8	4.9U	53	2.7J	63	0.77J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Benzo(a)pyrene	ug/kg	48UJ	15	4.9U	31	9.7	54	3.4U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Benzo(b)fluoranthene	ug/kg	48U	23	4.9U	40	16	100	1.7J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Benzo(g,h,i)perylene	ug/kg	48U	20	15	14	7.6	35	2.1J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Benzo(k)fluoranthene	ug/kg	48UJ	6.2	4.9U	7.7	4.6	34	3.4U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Chrysene	ug/kg	20J	16	4.9U	130	11	100	1.9J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Dibenz(a,h)anthracene	ug/kg	48U	4.5	4.9U	4.1	1.7J	6.9	3.4U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Fluoranthene	ug/kg	48UJ	14	3.6J	320D	34	140	1.8J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Fluorene	ug/kg	48UJ	2.6U	4.9U	140U	7.6U	17	3.4U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg	48U	20	4.8J	13	8.4	34	1.4J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Naphthalene	ug/kg	48U	2.8U	16	64U	3.2U	4.8	3.4U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Phenanthrene	ug/kg	48U	12	15U	350U	54U	99	7.1U	24
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	SVOA	Pyrene	ug/kg	48U	36	8.3J	170	41	170	5.3	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	TPH	TPH-Diesel	ug/kg	270000J	550000Y	390000YJ	15000000YHJ	1600000Y	500000Y	1400000Y	580000DY
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	TPH	TPH-Gasoline	ug/kg	740U	2900U	3800U	3500U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	2-Methylnaphthalene	ug/kg	8.5U	0.62J	9.9D	1.5J	2.6J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Acenaphthene	ug/kg	8.5U	0.23J	9.8U	0.88J	18X			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Acenaphthylene	ug/kg	8.5U	0.46J	23D	3.3U	3.2U			

Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	2006	2007	2008	2009	2010	2011	2012	2013
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Anthracene	ug/kg	8.5U	1.6J	92U	2.8J	190U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Benzo(a)anthracene	ug/kg	3.5J	5.7	21D	1.7J	8.6			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Benzo(a)pyrene	ug/kg	8.5U	6.0	27D	3.3	23			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Benzo(b)fluoranthene	ug/kg	8.5U	8.1	33D	7.5	33			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Benzo(g,h,i)perylene	ug/kg	8.5U	5.6	60D	4.9	19			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Benzo(k)fluoranthene	ug/kg	8.5U	2.8J	12D	1.9J	8.4			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Chrysene	ug/kg	3.5J	10	16D	3.0J	22			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Dibenz(a,h)anthracene	ug/kg	8.5U	1.0J	9.8JD	3.3U	4.3			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Fluoranthene	ug/kg	7.9J	9.0	49U	9.8	82			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Fluorene	ug/kg	8.5U	0.32J	9.8U	2.1J	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg	8.5U	5.5	52D	4.0	20			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Naphthalene	ug/kg	8.5U	2.8U	15D	3.8U	5.2			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Phenanthrene	ug/kg	4.7J	3.8	64U	8.1	110U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	SVOA	Pyrene	ug/kg	12	10	150D	17	110			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	TPH	TPH-Diesel	ug/kg	74000	190000Y	1800000YJ	510000YH	2000000Y			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-3	TPH	TPH-Gasoline	ug/kg	750U	2300U	3600J	4000U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	2-Methylnaphthalene	ug/kg	8.4U	2.5J	2.5J	2.1J	2.7J	0.66J	3.3U	0.62J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Acenaphthene	ug/kg	240	3.4	86J	21	3.7	3.2U	0.86J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Acenaphthylene	ug/kg	52	19	16J	2.2J	8.2	3.2U	0.74J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Anthracene	ug/kg	58	22	9.0J	18	17	3.2U	0.84J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Benzo(a)anthracene	ug/kg	100	130	27J	89	42	2.3J	2.6J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Benzo(a)pyrene	ug/kg	290	120	31J	60	50	4.2	3.4	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Benzo(b)fluoranthene	ug/kg	300	250	59	120	64	7.2	6.0	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Benzo(g,h,i)perylene	ug/kg	280	150	41	38	43	5.4	5.0	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Benzo(k)fluoranthene	ug/kg	83	64	19	42	23	1.7J	2.3J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Chrysene	ug/kg	130	85	48J	130	62	2.2J	1.8J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Dibenz(a,h)anthracene	ug/kg	80	30	10J	8.8	9.5	0.80J	3.3U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Fluoranthene	ug/kg	170	610	140J	240	120	7.8	9.6	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Fluorene	ug/kg	210	6.8	13J	6.4	9.9	3.2U	1.0J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg	310	130	42J	39	48	4.4	3.3	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Naphthalene	ug/kg	14	3.6U	11J	3.6U	5.2	1.2J	3.3U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Phenanthrene	ug/kg	91	120	32J	69	89	3.2U	5.0	3.1JX
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	SVOA	Pyrene	ug/kg	160	270	100J	110	100	12	12	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	TPH	TPH-Diesel	ug/kg	330000	270000Y	160000YJ	120000YH	130000Y	110000Y	100000Y	97000DY
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-4	TPH	TPH-Gasoline	ug/kg	1000	2700U	4900U	4400U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	2-Methylnaphthalene	ug/kg	8.3U	2.3J	0.52J	2.5J	3.5	1.0J	0.68J	2.0J
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Acenaphthene	ug/kg	14	1.1J	4.9U	4.6	5.4X	0.97J	5.0X	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Acenaphthylene	ug/kg	6.2J	0.48J	4.9U	2.8J	3.7U	3.4U	7.3	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Anthracene	ug/kg	25	3.9	4.9U	7.1U	12X	3.4U	18U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Benzo(a)anthracene	ug/kg	8.0J	6.5	3.5J	16	13	2.3J	3.4J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Benzo(a)pyrene	ug/kg	7.1J	6.2	3.2J	15	17	3.8	3.1J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Benzo(b)fluoranthene	ug/kg	17	11	5.5	26	23	8.2	6.7	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Benzo(g,h,i)perylene	ug/kg	9.9	9.4	6.4	20	18	3.9	3.9	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Benzo(k)fluoranthene	ug/kg	7.4J	3.9	2.5J	5.8	5.8	2.3J	2.7J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Chrysene	ug/kg	24	15	4.5J	19	20	5.2	2.8J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Dibenz(a,h)anthracene	ug/kg	8.3U	1.4J	2.5J	5.9	4.5	3.4U	3.5U	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Fluoranthene	ug/kg	43	16	5.6J	41	29	12	16	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Fluorene	ug/kg	8.3U	1.3J	4.9U	2.9J	3.5	3.4U	3.4JX	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg	8.3U	7.9	5.3J	13	16	3.4J	3.0J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Naphthalene	ug/kg	7.7J	2.7U	0.90J	3.4U	3.0U	1.6J	2.2J	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Phenanthrene	ug/kg	20	9.9	4.9U	7.2U	11U	4.6U	3.5U	21
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	SVOA	Pyrene	ug/kg	51	13	6.4J	44	42	19	25	
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	TPH	TPH-Diesel	ug/kg	250000	100000Y	36000J	280000YHJ	340000Y	110000Y	430000Y	170000DY
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-5	TPH	TPH-Gasoline	ug/kg	690U	2300U	3700U	2900U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	2-Methylnaphthalene	ug/kg	8.6U	0.53J	1.2J	1.1J	0.70J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Acenaphthene	ug/kg	8.6UJ	2.6U	0.52J	0.62J	0.61J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Acenaphthylene	ug/kg	8.6UJ	2.6U	0.99J	3.3U	3.3U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Anthracene	ug/kg	8.6U	0.40J	1.4J	0.63J	0.78J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Benzo(a)anthracene	ug/kg	4.8J	2.6U	2.8J	1.8J	2.2J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Benzo(a)pyrene	ug/kg	3.5J	1.4J	3.2J	2.5J	2.3J			

Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	2006	2007	2008	2009	2010	2011	2012	2013
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Benzo(b)fluoranthene	ug/kg	7.7J	3.0	6.6	3.7	4.5			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Benzo(g,h,i)perylene	ug/kg	8.6UJ	2.6U	5.5	2.2J	2.5J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Benzo(k)fluoranthene	ug/kg	7.7UJ	1.1J	2.1J	1.1J	1.8J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Chrysene	ug/kg	3.8J	2.6U	5.1J	4.5	4.6			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Dibenz(a,h)anthracene	ug/kg	8.6UJ	0.39J	5.0UJ	3.3U	3.3U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Fluoranthene	ug/kg	17J	3.2	3.7J	6.1	6.3			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Fluorene	ug/kg	8.6UJ	2.6U	1.1J	3.3U	0.64J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg	8.6UJ	2.6U	5.7J	1.8J	2.6J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Naphthalene	ug/kg	8.6U	2.6U	1.3J	3.3U	0.90J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Phenanthrene	ug/kg	4.8J	0.91J	2.0J	3.8	4.5			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	SVOA	Pyrene	ug/kg	18	2.9	4.3J	5.0	5.3			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	TPH	TPH-Diesel	ug/kg	44000	53000H	17000HJ	74000YH	71000Y			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-6	TPH	TPH-Gasoline	ug/kg	1100U	2100U	4100U	3700U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	2-Methylnaphthalene	ug/kg	8.5U	2.9U	4.9U	1.1J	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Acenaphthene	ug/kg	8.5U	2.9U	0.28J	0.55J	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Acenaphthylene	ug/kg	8.5U	2.9U	4.9U	3.4U	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Anthracene	ug/kg	8.5U	2.9U	0.95J	3.4U	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Benzo(a)anthracene	ug/kg	8.5U	2.9U	4.9UJ	0.99J	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Benzo(a)pyrene	ug/kg	8.5U	2.9U	2.1J	1.2J	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Benzo(b)fluoranthene	ug/kg	8.5U	1.5J	2.6J	2.0J	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Benzo(g,h,i)perylene	ug/kg	8.5U	1.1J	2.8J	1.3J	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Benzo(k)fluoranthene	ug/kg	8.5U	2.9U	1.3J	3.4U	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Chrysene	ug/kg	8.5U	2.9U	2.2J	3.4U	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Dibenz(a,h)anthracene	ug/kg	8.5U	2.9U	4.9UJ	3.4U	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Fluoranthene	ug/kg	8.5U	2.9U	3.8J	1.7J	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Fluorene	ug/kg	8.5U	2.9U	0.46J	3.4U	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg	8.5U	2.9U	2.6J	1.1J	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Naphthalene	ug/kg	8.5U	2.9U	0.41J	3.4U	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Phenanthrene	ug/kg	8.5U	2.9U	2.4J	3.4U	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	SVOA	Pyrene	ug/kg	8.5U	2.9U	4.6J	1.4J	3.2U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	TPH	TPH-Diesel	ug/kg	7300	12000J	11000UJ	27000U	7100J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	TPH	TPH-Gasoline	ug/kg	730U	2100U	4000U	4000U				
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	2-Methylnaphthalene	ug/kg	8.6U	0.47J	12	1.7J	3.1U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Acenaphthene	ug/kg	8.6U	0.39J	6.4	1.4J	0.86J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Acenaphthylene	ug/kg	8.6U	2.9U	4.7J	0.92J	3.1U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Anthracene	ug/kg	8.6U	1.3J	17	8.1	2.5J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Benzo(a)anthracene	ug/kg	8.6U	3.9J	11	59	16			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Benzo(a)pyrene	ug/kg	8.6UJ	5.3J	13	35	16			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Benzo(b)fluoranthene	ug/kg	8.6UJ	11	18	57	31			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Benzo(g,h,i)perylene	ug/kg	8.6UJ	6.4	33	31	14			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Benzo(k)fluoranthene	ug/kg	8.6UJ	3.5	7.6	18	9.5			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Chrysene	ug/kg	8.6U	5.5J	16	57	21			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Dibenz(a,h)anthracene	ug/kg	8.6UJ	1.3J	4.9U	5.9	2.8J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Fluoranthene	ug/kg	6.4J	32	21	96	51			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Fluorene	ug/kg	8.6U	0.51J	7.8	1.3J	1.2J			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg	8.6UJ	6.1	29	24	15			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Naphthalene	ug/kg	8.6U	3.3J	29	3.2U	3.1U			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Phenanthrene	ug/kg	8.6U	13	32	16	10			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	SVOA	Pyrene	ug/kg	11	20	29	110	39			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	TPH	TPH-Diesel	ug/kg	180000	94000H	380000YJ	120000YH	200000Y			
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	TPH	TPH-Gasoline	ug/kg	790U	2000U	8000U	3000U				
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	TPH	TPH-Diesel	ug/kg		900000Y						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	Benzene	ug/kg		17U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	Ethylbenzene	ug/kg		17U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	Toluene	ug/kg		17U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	Xylenes	ug/kg		51U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	m,p-Xylene	ug/kg		34U						
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	NL-03	VOA	o-Xylene	ug/kg		17U						
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	TPH	TPH-Gasoline	ug/kg		2800UJ	300000ZJ	13000J	85000UJ	54000U	67000U	52000U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	TPH	TPH-Diesel	ug/kg				89000Y	160000Z	100000Z		

Summary of Sediment Analytical Results 2006 through 2013
TO 66 Groundwater and Landfill Monitoring Report
Former Naval Complex, Adak, Alaska

Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	TPH	TPH-Diesel w/ silica gel cleanu	ug/kg					120000J	44000U		
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Benzene	ug/kg		12U	58J	66U	700U	500U	670UJ	540U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Ethylbenzene	ug/kg		12U	270	66U	700U	500U	670UJ	540U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	m,p-Xylene	ug/kg		23U	26000J	62J	700U	500U	670UJ	540U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	o-Xylene	ug/kg		12U	240U	66U	700U	500U	670UJ	540U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Toluene	ug/kg		12U	240U	66U	700U	500U	670UJ	540U
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Xylenes	ug/kg		35U	26000J	62J	1400U	1000U	1340UJ	1080U
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A		NL-05	TPH	TPH-Gasoline	ug/kg				7000U	6800U	6400U	5400U	22000U
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A		NL-05	TPH	TPH-Diesel	ug/kg				40000YH	61000H	120000DY	59000Y	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A		NL-05	TIN	Lead	ug/kg				13200J				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A		NL-05	VOA	Benzene	ug/kg				25U	49U	64U	73U	
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A		NL-05	VOA	Ethylbenzene	ug/kg				25U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A		NL-05	VOA	m,p-Xylene	ug/kg				49U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A		NL-05	VOA	o-Xylene	ug/kg				25U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A		NL-05	VOA	Toluene	ug/kg				25U				
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A		NL-05	VOA	Xylenes	ug/kg				74U				
SWMU 58 and SA 73, Heating Plant 6	UST 10591 - NSGA	RV	NL-07	TPH	TPH-Diesel	ug/kg				200000Z				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	TPH	TPH-Gasoline	ug/kg				53000U	76000U	84000U	90000U	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	TPH	TPH-Diesel	ug/kg				1200000Y	370000YJ	190000Z		
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	TPH	TPH-Diesel w/ silica gel cleanu	ug/kg					310000YJ	68000U		
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	Benzene	ug/kg				220U	720UJ	780U	900UJ	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	Ethylbenzene	ug/kg				220U	720UJ	780U	900UJ	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	m,p-Xylene	ug/kg				96J	720UJ	780U	900UJ	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	o-Xylene	ug/kg				220U	720UJ	780U	900UJ	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	Toluene	ug/kg				220U	720UJ	780U	900UJ	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-D-04	VOA	Xylenes	ug/kg				96J	1400UJ	1600U	1800UJ	
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	TPH	TPH-Gasoline	ug/kg				39000U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	TPH	TPH-Diesel	ug/kg				66000J				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	Benzene	ug/kg				150U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	Ethylbenzene	ug/kg				150U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	m,p-Xylene	ug/kg				300U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	o-Xylene	ug/kg				150U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	Toluene	ug/kg				150U				
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-U-04	VOA	Xylenes	ug/kg				450U				
Former Power Plant, Building T-1451			NL-08	SVOA	2-Methylnaphthalene	ug/kg					3.1U	4.0U	5.0U	3.2U
Former Power Plant, Building T-1451			NL-08	SVOA	Acenaphthene	ug/kg					3.1U	2.1J	5.0U	
Former Power Plant, Building T-1451			NL-08	SVOA	Acenaphthylene	ug/kg					3.1U	4.0U	5.0U	
Former Power Plant, Building T-1451			NL-08	SVOA	Anthracene	ug/kg					3.1U	9.4	1.2J	
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(a)anthracene	ug/kg					1.4J	150	4.3J	
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(a)pyrene	ug/kg					1.3J	92	5.7	
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(b)fluoranthene	ug/kg					1.7J	130	7.4	
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(g,h,i)perylene	ug/kg					1.7J	65	6.5	
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(k)fluoranthene	ug/kg					3.1U	42	2.8J	
Former Power Plant, Building T-1451			NL-08	SVOA	Chrysene	ug/kg					1.1J	150	6.0	
Former Power Plant, Building T-1451			NL-08	SVOA	Dibenz(a,h)anthracene	ug/kg					3.1U	14	1.4J	
Former Power Plant, Building T-1451			NL-08	SVOA	Fluoranthene	ug/kg					1.7J	190	8.0	
Former Power Plant, Building T-1451			NL-08	SVOA	Fluorene	ug/kg					3.1U	4.0U	5.0U	
Former Power Plant, Building T-1451			NL-08	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg					1.6J	68	5.6	
Former Power Plant, Building T-1451			NL-08	SVOA	Naphthalene	ug/kg					3.1U	1.2J	1.1J	
Former Power Plant, Building T-1451			NL-08	SVOA	Phenanthrene	ug/kg					3.1U	29	3.0J	2.7J
Former Power Plant, Building T-1451			NL-08	SVOA	Pyrene	ug/kg					1.4J	210	6.7	
Former Power Plant, Building T-1451			NL-08	TPH	TPH-Diesel	ug/kg					51000Y	420000DY	170000DY	84000DY
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	2-Methylnaphthalene	ug/kg					3.2U	1.0J	3.5U	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Acenaphthene	ug/kg					0.91J	3.7	1.5J	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Acenaphthylene	ug/kg					3.2U	3.3U	3.5U	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Anthracene	ug/kg					3.2U	3.3U	3.5U	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(a)anthracene	ug/kg					3.2U	0.95J	1.2J	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(a)pyrene	ug/kg					3.2U	0.99J	3.5U	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(b)fluoranthene	ug/kg					3.2U	2.3J	1.4J	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(g,h,i)perylene	ug/kg					3.2U	2.1J	3.5U	

Summary of Sediment Analytical Results 2006 through 2013
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Site Name (per CMP and Monitoring Report)	NIRIS Site_Name	Location Type	Location Name	Method Class	Analyte	Units	2006	2007	2008	2009	2010	2011	2012	2013
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(k)fluoranthene	ug/kg					3.2U	3.3U	3.5U	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Chrysene	ug/kg					3.2U	1.4J	3.5U	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Dibenz(a,h)anthracene	ug/kg					3.2U	3.3U	3.5U	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Fluoranthene	ug/kg					3.2U	1.7J	3.5U	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Fluorene	ug/kg					3.5	16	4.7	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Indeno(1,2,3-cd)pyrene	ug/kg					3.2U	1.3J	3.5U	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Naphthalene	ug/kg					3.3	11X	3.7	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Phenanthrene	ug/kg					3.2U	3.3U	3.5U	
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Pyrene	ug/kg					3.2U	3.3U	1.2J	
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Benzene	ug/kg					72 U	36U	51U	
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Ethylbenzene	ug/kg					72 U	36U	51U	
SWMU 62, New Housing Fuel Leak			NL-09	VOA	m,p-Xylene	ug/kg					72 U	36U	51U	
SWMU 62, New Housing Fuel Leak			NL-09	VOA	o-Xylene	ug/kg					72 U	61	16J	
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Toluene	ug/kg					72 U	36U	51U	
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Xylenes	ug/kg					144U	61	16J	
SWMU 62, New Housing Fuel Leak			NL-09	TPH	TPH-Diesel	ug/kg					39000Y	210000Y	69000Y	
SWMU 62, New Housing Fuel Leak			NL-09	TPH	TPH-Gasoline	ug/kg					6900UJ	2600J	4700U	

APPENDIX C-2

LANDFILL SITES DATA SUMMARY TABLE – 1996 THROUGH 2013

Table C-2-A
Summary of Chemicals for Sediment at Palisades Landfill

SWMU	Location Cross Reference	Matrix	Method Class		Analyte	Units	Concentration																			
							5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003		9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	8/2011
11	101	Sediment	P/A	72-54-8	4,4-DDD	ug/Kg	3.6 U	2.6 U	0.26 U	0.26 U	0.29 U	10000 U	6.3 U	0.81 U	2 U	5.9 U										
11	101	Sediment	P/A	72-55-9	4,4-DDE	ug/Kg	3.6 U	2.6 U	0.26 U	0.13 U	0.15 U	10000 U	6.3 U	0.81 U	2 U	3.5 U										
11	101	Sediment	P/A	50-29-3	4,4-DDT	ug/Kg	3.6 U	0.99 J	0.11 NJ	0.25 J	0.29 U	10000 U	6.3 U	0.81 U	2 U	4.2 U										
11	101	Sediment	P/A	309-00-2	Aldrin	ug/Kg	1.8 U	1.3 U	0.13 U	0.13 U	0.15 U	10000 U	3.3 U	0.42 U	2 U	5.2 U										
11	101	Sediment	P/A	319-84-6	alpha-BHC	ug/Kg	1.8 U	1.3 U	0.13 U	0.13 U	0.15 U	10000 U	3.3 U	0.42 U	2 U	3.9 U										
11	101	Sediment	P/A	5103-71-9	alpha-Chlordane	ug/Kg	1.8 U	1.3 U	0.13 U	0.13 U	0.03 J	10000 U	3.3 U	0.42 U	2 U	4.2 U										
11	101	Sediment	P/A	12674-11-2	Aroclor 1016	ug/Kg	36 U	5.2 U	2.6 U	2.6 U	2.9 U	100 U	63 U	8.1 U	39.5 U	10 U	15 U	16.6	16.6 U		48 U		7.1 U		7.8 U 7.5 U	
11	101	Sediment	P/A	11104-28-2	Aroclor 1221	ug/Kg	73 U	52 U	5.3 U	5.2 U	5.9 U	100 U	130 U	16 U	39.5 U	10 U	15 U	33.5	33.5 U		48 U		15 U		16 U 15 U	
11	101	Sediment	P/A	11141-16-5	Aroclor 1232	ug/Kg	36 U	26 U	2.6 U	2.6 U	2.9 U	100 U	63 U	8.1 U	39.5 U	10 U	15 U	16.6	16.6 U		48 U		7.1 U		7.8 U 7.5 U	
11	101	Sediment	P/A	53469-21-9	Aroclor 1242	ug/Kg	36 U	26 U	2.6 U	2.6 U	2.9 U	100 U	63 U	8.1 U	39.5 U	10 U	15 U	16.6	16.6 U		48 U		7.1 U		7.8 U 7.5 U	
11	101	Sediment	P/A	12672-29-6	Aroclor 1248	ug/Kg	36 U	26 U	2.6 U	2.6 U	2.9 U	100 U	63 U	8.1 U	39.5 U	10 U	15 U	16.6	16.6 U		48 U		7.1 U		7.8 U 7.5 U	
11	101	Sediment	P/A	11097-69-1	Aroclor 1254	ug/Kg	36 U	26 U	2.6 U	2.6 U	2.9 U	100 U	63 U	8.1 U	39.5 U	10 U	15 U	16.6	16.6 U		48 U		7.1 U		7.8 U 7.5 U	
11	101	Sediment	P/A	11096-82-5	Aroclor 1260	ug/Kg	36 U	16 NJ	2.6 U	4.8	8.2	100 U	63 U	12	39.5 U	10 U	15 U	16.6	16.6 U		48 U		4.8 J		5.9 J 6.8 J	
11	101	Sediment	P/A		Sum of Aroclors	ug/Kg																	4.8 J		5.9 J 6.8 J	
11	101	Sediment	P/A	319-85-7	beta-BHC	ug/Kg	1.8 U	1.3 U	0.13 U	0.13 U	0.15 U	10000 U	3.3 U	0.42 U	2 U	1.2 J										
11	101	Sediment	P/A	57-74-9	Chlordane	ug/Kg										4.2 U										
11	101	Sediment	P/A	-73	Chlordane (total)	ug/Kg	1.8 U	1.3 U	0.13 U	0.13 U	0.03	10000 U														
11	101	Sediment	P/A	-62	DDT (total)	ug/Kg	3.6 U	0.99	0.11	0.25	0.29 U	10000 U														
11	101	Sediment	P/A	319-86-8	delta-BHC	ug/Kg	1.8 U	1.3 U	0.13 U	0.064 J	0.059 NJ	10000 U	3.3 U	0.42 U	2 U	4.2 J										
11	101	Sediment	P/A	60-57-1	Dieldrin	ug/Kg	3.6 U	2.6 U	0.26 U	0.26 U	0.29 U	10000 U	6.3 U	0.81 U	2 U	3.9 U										
11	101	Sediment	P/A	-74	Endosulfan (total)	ug/Kg	3.6 U	2.6 U	0.039	0.12	0.26	10000 U														
11	101	Sediment	P/A	959-98-8	Endosulfan I	ug/Kg	1.8 U	1.3 U	0.13 U	0.13 U	0.15 U	10000 U	3.3 U	0.42 U	2 U	3.2 U										
11	101	Sediment	P/A	33213-65-9	Endosulfan II	ug/Kg	3.6 U	2.6 U	0.039 NJ	0.12 NJ	0.26 J	10000 U	6.3 U	0.81 U	2 U	5.1 U										
11	101	Sediment	P/A	1031-07-8	Endosulfan sulfate	ug/Kg	3.6 U	2.6 U	0.26 U	0.26 U	0.29 U	10000 U	6.3 U	0.81 U	2 U	2.8 U										
11	101	Sediment	P/A	72-20-8	Endrin	ug/Kg	3.6 UJ	0.48 J	0.094 J	0.13 NJ	0.16 NJ	10000 U	6.3 U	0.81 U	2 U	8.5 U										
11	101	Sediment	P/A	7421-93-4	Endrin Aldehyde	ug/Kg	3.6 U	0.98 J	0.26 U	0.31 NJ	0.61 NJ	10000 U	6.3 U	0.81 U	2 U	13 U										
11	101	Sediment	P/A	53494-70-5	Endrin ketone	ug/Kg	3.6 U	2.6 U	0.13 NJ	0.26 U	0.29 U	10000 U	6.3 U	0.81 U	2 U	2.3 U										
11	101	Sediment	P/A	5103-74-2	gamma-Chlordane	ug/Kg	1.8 U	1.3 U	0.13 U	0.13 U	0.15 U	10000 U	3.3 U	0.42 U	2 U	6.5 U										
11	101	Sediment	P/A	76-44-8	Heptachlor	ug/Kg	1.8 U	1.3 U	0.13 U	0.13 U	0.15 U	10000 U	3.3 U	0.42 U	2 U	15 U										
11	101	Sediment	P/A	1024-57-3	Heptachlor epoxide	ug/Kg	1.8 U	1.3 U	0.13 U	0.055 J	0.15 U	10000 U	3.3 U	0.42 U	2 U	8.5 U										
11	101	Sediment	P/A	58-89-9	Lindane	ug/Kg	1.8 U	1.3 U	0.13 U	0.13 U	0.15 U	10000 U	3.3 U	0.42 U	2 U	10 U										
11	101	Sediment	P/A	72-43-5	Methoxychlor	ug/Kg	18 U	13 U	0.26 U	0.16 NJ	0.29 U	20000 U	33 U	4.2 U	2 U	19 U										
11	101	Sediment	P/A	-65	PCB (Sum Detect + .5 NonDetect)	ug/Kg	73 U	16	5.3 U	4.8	8.2	100 U														
11	101	Sediment	P/A	12789-03-6	Technical Chlordane	ug/Kg					5.9 U															
11	101	Sediment	P/A	8001-35-2	Toxaphene	ug/Kg	180 U	130 U	13 U	13 U	15 U	300000 U	330 U	42 U	130 U	31 U										
11	101	Sediment	SVOA	120-82-1	1,2,4-Trichlorobenzene	ug/Kg	66 U	23 U	6 U	7 U	6 U	300 U	640 U	410 U	1300 U		220 U									
11	101	Sediment	SVOA	95-50-1	1,2-Dichlorobenzene	ug/Kg	77 U	27 U	6 U	8 U	8 U	300 U	640 U	410 U	1300 U		240 U									
11	101	Sediment	SVOA	122-66-7	1,2-Diphenylhydrazine	ug/Kg							640 U													
11	101	Sediment	SVOA	541-73-1	1,3-Dichlorobenzene	ug/Kg	77 U	27 U	6 U	8 U	8 U	300 U	640 U	410 U	1300 U		240 U									
11	101	Sediment	SVOA	106-46-7	1,4-Dichlorobenzene	ug/Kg	66 U	23 U	6 U	7 U	6 U	300 U	640 U	410 U	1300 U											
11	101	Sediment	SVOA	108-60-1	2,2-oxybis(1-Chloropropane)	ug/Kg	190 U	65 U	16 U	20 U	18 U	300 U	640 U	410 U	1300 U		260 U									
11	101	Sediment	SVOA	95-95-4	2,4,5-Trichlorophenol	ug/Kg	110 U	38 U	9 U	12 U	11 U	300 U	640 U	410 U	650 U		200 U									
11	101	Sediment	SVOA	88-06-2	2,4,6-Trichlorophenol	ug/Kg	120 U	42 U	10 U	13 U	12 U	300 U	640 U	410 U	650 U		200 U									
11	101	Sediment	SVOA	120-83-2	2,4-Dichlorophenol	ug/Kg	110 U	38 U	9 U	12 U	11 U	300 U	640 U	410 U	1300 U		200 U									
11	101	Sediment	SVOA	105-67-9	2,4-Dimethylphenol	ug/Kg	150 U	53 U	13 U	17 U	15 U	300 U	640 U	410 U	1300 U		200 UJ									
11	101	Sediment	SVOA	51-28-5	2,4-Dinitrophenol	ug/Kg	190 UJ	65 U	16 U	20 UJ	18 U	2000 U	1300 U	820 U	7790 U		1300 U									
11	101	Sediment	SVOA	121-14-2	2,4-Dinitrotoluene	ug/Kg	190 U	65 U	16 U	20 U	18 U	300 U	640 U	410 U	650 U		200 U									
11	101	Sediment	SVOA	606-20-2	2,6-Dinitrotoluene	ug/Kg	170 U	57 U	14 U	18 U	16 U	300 U	640 U	410 U	650 U		200 U									
11	101	Sediment	SVOA	91-58-7	2-Chloronaphthalene	ug/Kg	88 U	30 U	7 U	10 U	9 U	300 U	640 U	410 U	650 U		200 U									
11	101	Sediment	SVOA	95-57-8	2-Chlorophenol	ug/Kg	88 U	30 U	7 U	10 U	9 U	300 U	640 U	410 U	1300 U		200 U									
11	101	Sediment	SVOA	91-57-6	2-Methylnaphthalene	ug/Kg	180 U	61 U	15 U	19 U	17 U	300 U	640 U	8 U	909 U	96	20			#REF!	19 U	0.48 J	0.35 J	1.1 J	16 1.9 U	
11	101	Sediment	SVOA	95-48-7	2-Methylphenol	ug/Kg	180 U	61 U	15 U	19 U	17 U	300 U	640 U	410 U	1300 U		200 U	134	134 U	#REF!						
11	101	Sediment	SVOA	88-74-4	2-Nitroaniline	ug/Kg	150 U	53 U	13 U	17 UJ	15 U	2000 U	640 U	410 U	650 U		200 U				#REF!					
11	101	Sediment	SVOA	88-75-5	2-Nitrophenol	ug/Kg	110 U	38 U	9 U	12 U	11 U	300 U	640 U	410 U	1300 U		200 U				#REF!					
11	101	Sediment	SVOA	91-94-1	3,3-Dichlorobenzidine	ug/Kg	88 U	30 U	7 UJ	10 UJ	9 U	2000 U	1300 U	410 U	1300 U		200 U				#REF!					
11	101	Sediment	SVOA	99-09-2	3-Nitroaniline	ug/Kg	130 U	46 UJ	11 U	14 U	13 U	2000 U	640 U	410 U	650 U		200 U				#REF!					
11	101	Sediment	SVOA	534-52-1	4,6-Dinitro-2-methylphenol	ug/Kg	170 U	57 U	14 U	18 U	16 U	2000 U	1300 U	410 U	7790 U		200 U				#REF!					
11	101	Sediment	SVOA	101-55-3	4-Bromophenyl-phenylether	ug/Kg	110 U	38 U	9 U	12 U	11 U	300 U	640 U	410 U	650 U		200 U				#REF!					
11	101	Sediment	SVOA	59-50-7	4-Chloro-3-methylphenol	ug/Kg	280 U	95 U	23 U	30 U	27 U	300 U	640 U	410 U	1300 U		200 U				#REF!					
11	101	Sediment	SVOA	106-47-8	4-Chloroaniline	ug/Kg	200 U	68 U	17 U	21 U	19 U	300 U	640 U	410 U	1300 U		320 U				#REF!					
11	101	Sediment	SVOA	98-57-7	4-Chlorophenyl methylsulfone	ug/Kg											200 U				#REF!					
11	101	Sediment	SVOA	7005-72-3	4-Chlorophenyl-phenylether	ug/Kg	120 U	42 U	10 U	13 U	12 U	300 U	640 U	410 U	650 U		200 U				#REF!					
11	101	Sediment	SVOA	106-44-5	4-Methylphenol	ug/Kg	220 U	76 U	19 U	24 U	22 U	300 U	640 U	410 U			200 U				#REF!					
11	101	Sediment	SVOA	100-01-6	4-Nitroaniline	ug/Kg	140 U	49 U	12 U	15 UJ	14 U	2000 U	640 U	410 U	650 U		200 U				#REF!					
11	101	Sediment	SVOA	100-02-7	4-Nitrophenol	ug/Kg	180 U	61 U	15 U	19 U	17 U	2000 U	1300 U	410 U	6500 U		200 UJ				#REF!					
11	101	Sediment	SVOA	83-32-9	Acenaphthene	ug/Kg	77 U	27 U	6 U	8 U	4 J	300 U	640 U	8 U	650 U	48	2 U	660	660 U	#REF!	19 U	2.3 U	2.5 U	2.1 U	16 1.9 U	
11	101	Sediment	SVOA	208-96-8	Acenaphthylene	ug/Kg	88 U	30 U	7 U	10 U	9 U	300 U	640 U	8 U	650 U	37	2.3 U			#REF!	19 U	2.3 U	2.5 U	2.1 U	4.5 1.9 U	
11	101	Sediment	SVOA	62-53-3	Aniline	ug/Kg						1000 U	640 U		2600 U		200 U			#REF!						
11	101	Sediment	SVOA	120-12-7	Anthracene	ug/Kg	77 U	27 U	6 U	10	15	300 U	640 U	8 U	650 U	21	2 U	660	660 U	#REF!	19 U	2.3 U	2.5 U	2.1 U	39 1.9 U	
11	101	Sediment	SVOA	103-33-3	Azobenzene	ug/Kg									650 U					#REF!						

Table C-2-A
Summary of Chemicals for Sediment at Palisades Landfill

SWMU	Location Cross Reference	Matrix	Method Class		Analyte	Units	Concentration																		
							5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003		9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	8/2011
11	101	Sediment	SVOA	92-87-5	Benzidine	ug/Kg							3200 U							#REF!						
11	101	Sediment	SVOA	56-55-3	Benzo(a)anthracene	ug/Kg	77 U	27 U	6 U	19	20	300 U	640 U	8 U	650 U	28	2 U	660	660 U	#REF!	19 U	2.3 U	0.71 J	2.5 U	62 1.2 J	
11	101	Sediment	SVOA	50-32-8	Benzo(a)pyrene	ug/Kg	77 U	27 U	7	12	18	300 U	640 U	8 U	650 U	26	3.4 U	29.2	29.2	#REF!	19 U	2.3 U	0.62 J	2.8 U	54 1.7 J	
11	101	Sediment	SVOA	205-99-2	Benzo(b)fluoranthene	ug/Kg	100 U	34 U	13	23	20	300 U	29 J	8 U	909 U	39	61 J	660	660 U	#REF!	19 U	2.3 U	0.88 J	5.7	56 4.4	
11	101	Sediment	SVOA	191-24-2	Benzo(g,h,i)perylene	ug/Kg	150 U	53 U	13 U	7 J	9 J	300 U	640 U	8 U	909 U	19	2 U	660	660 U	#REF!	19 U	2.3 U	1.2 J	4.0	31 2.9	
11	101	Sediment	SVOA	207-08-9	Benzo(k)fluoranthene	ug/Kg	88 U	30 U	7 U	9 J	10	300 U	640 U	8 U	650 U	13	2 U	660	660 U	#REF!	19 U	2.3 U	2.5 U	2.1 U	18 1.3 J	
11	101	Sediment	SVOA	-66	Benzofluoranthenes (total)	ug/Kg	100 U	34 U	13	32	30	300 U								#REF!						
11	101	Sediment	SVOA	65-85-0	Benzoic acid	ug/Kg						2000 U	68 J		6500 U		1600 UJ	2000	2000 U	#REF!						
11	101	Sediment	SVOA	100-51-6	Benzyl alcohol	ug/Kg						300 U	640 U		909 U		200 U			#REF!						
11	101	Sediment	SVOA	111-91-1	bis(2-Chloroethoxy)methane	ug/Kg	150 U	53 U	13 U	17 U	15 U	300 U	640 U	410 U	909 U		230 U			#REF!						
11	101	Sediment	SVOA	111-44-4	bis(2-Chloroethyl)ether	ug/Kg	120 U	42 U	10 U	13 U	12 U	300 U	640 U	410 U	1300 U		240 U			#REF!						
11	101	Sediment	SVOA	117-81-7	bis(2-Ethylhexyl)phthalate	ug/Kg	140 J	32 U	31 U	23 J	10 U	300 U	36 J	410 U	650 U		200 U	4000	4000 U	#REF!	34 U	5.1 J	5.0 J	84 U	78 U 75 U	
11	101	Sediment	SVOA	85-68-7	Butylbenzylphthalate	ug/Kg	190 U	65 U	16 U	20 U	18 U	300 U	640 U	410 U	650 U		200 U			#REF!						
11	101	Sediment	SVOA	86-74-8	Carbazole	ug/Kg	88 U	30 UJ	7 U	5 J	5 J		640 U	410 U				660	660 U	#REF!						
11	101	Sediment	SVOA	218-01-9	Chrysene	ug/Kg	100 U	34 U	20	24	24	300 U	33 J	8 U	650 U	30	120 J	660	660 U	#REF!	19 U	2.3 U	1.5 J	5.5	82 3.2	
11	101	Sediment	SVOA	-61	CPAH (total)	ug/Kg	220 U	76 U	40	95	101	300 U								#REF!						
11	101	Sediment	SVOA	53-70-3	Dibenz(a,h)anthracene	ug/Kg	220 U	76 U	19 U	24 U	22 U	300 U	640 U	8 U	909 U	7.1	2 U			#REF!	19 U	2.3 U	0.31 J	2.1 U	6.3 1.9 U	
11	101	Sediment	SVOA	132-64-9	Dibenzofuran	ug/Kg	88 U	30 U	7 U	10 U	9 U	300 U	640 U	410 U	650 U		200 U			#REF!						
11	101	Sediment	SVOA	84-66-2	Diethylphthalate	ug/Kg	170 U	57 U	14 U	18 U	16 U	300 U	640 U	410 U	650 U		200 U			#REF!						
11	101	Sediment	SVOA	131-11-3	Dimethylphthalate	ug/Kg	55 U	19 U	5 U	6 U	5 U	300 U	640 U	410 U	650 U		200 U			#REF!						
11	101	Sediment	SVOA	84-74-2	Di-n-butylphthalate	ug/Kg	150 U	53 U	13 U	17 U	15 U	300 U	640 U	410 U	650 U		270	2000	2000 U	#REF!						
11	101	Sediment	SVOA	117-84-0	Di-n-octylphthalate	ug/Kg	200	57 U	14 UJ	18 UJ	16 U	300 U	640 U	460 J	650 U		200 U	660	660 U	#REF!						
11	101	Sediment	SVOA	206-44-0	Fluoranthene	ug/Kg	77 U	27 U	12	38	43	300 U	79 J	17	650 U	60	100 J	660	660 U	#REF!	19 U	0.49 J	2.5 U	5.7	200 11	
11	101	Sediment	SVOA	86-73-7	Fluorene	ug/Kg	100 U	34 U	8 U	11 U	8 J	300 U	640 U	8 U	650 U	42	2 U	660	660 U	#REF!	19 U	2.3 U	2.5 U	2.1 U	26 1.9 U	
11	101	Sediment	SVOA	118-74-1	Hexachlorobenzene	ug/Kg	220 U	76 U	19 U	24 U	22 U	300 U	640 U	410 U	650 U		200 U			#REF!						
11	101	Sediment	SVOA	87-68-3	Hexachlorobutadiene	ug/Kg	260 U	91 U	22 U	28 U	26 U	300 U	640 U	410 U	2600 U		240 U			#REF!						
11	101	Sediment	SVOA	77-47-4	Hexachlorocyclopentadiene	ug/Kg	55 U	19 U	5 U	6 U	5 U	300 U	640 U	410 U	1300 U		200 U			#REF!						
11	101	Sediment	SVOA	67-72-1	Hexachloroethane	ug/Kg	77 U	27 U	6 U	8 U	8 U	300 U	640 U	410 U	1300 U		220 U			#REF!						
11	101	Sediment	SVOA	-63	HPAH (total)	ug/Kg	220 U	76 U	66	184	206	300 U								#REF!						
11	101	Sediment	SVOA	193-39-5	Indeno(1,2,3-cd)pyrene	ug/Kg	120 U	42 U	10 U	8 J	9 J	300 U	640 U	8 U	650 U	16	2 U	11.1	11.1	#REF!	19 U	2.3 U	0.95 J	3.5	31 2.5	
11	101	Sediment	SVOA	78-59-1	Isophorone	ug/Kg	220 U	76 U	19 U	24 U	22 U	300 U	640 U	410 U	650 U		200 U			#REF!						
11	101	Sediment	SVOA	-64	LPAH (total)	ug/Kg	100 U	34 U	8 U	39	92	300 U								#REF!						
11	101	Sediment	SVOA	-160	m,p-Cresols	ug/Kg									6500 U					#REF!						
11	101	Sediment	SVOA	91-20-3	Naphthalene	ug/Kg	88 U	30 U	7 U	10 U	9 U	300 U	640 U	8 U	1300 U	110	8			#REF!	19 U	2.3 U	0.84 J	2.1 U	9.4 0.88 J	
11	101	Sediment	SVOA	-150	NCPAH (total)	ug/Kg	180 U	61 U	26	128	197	300 U								#REF!						
11	101	Sediment	SVOA	98-95-3	Nitrobenzene	ug/Kg	130 U	46 U	11 U	14 U	13 U	300 U	640 U	410 U	1300 U		200 U			#REF!						
11	101	Sediment	SVOA	62-75-9	N-Nitrosodimethylamine	ug/Kg						2000 U			909 U					#REF!						
11	101	Sediment	SVOA	621-64-7	N-Nitrosodinpropylamine	ug/Kg	330 U	110 U	28 U	36 U	32 U	300 U	640 U	410 U	909 U		200 U			#REF!						
11	101	Sediment	SVOA	86-30-6	N-Nitrosodiphenylamine	ug/Kg	100 U	34 U	8 U	11 U	10 U	300 U	640 U	410 U	650 U		310 U			#REF!						
11	101	Sediment	SVOA	87-86-5	Pentachlorophenol	ug/Kg	150 U	53 U	13 U	38	15 U	2000 U	1300 U	410 U	6500 U		200 U	134	134 U	#REF!						
11	101	Sediment	SVOA	85-01-8	Phenanthrene	ug/Kg	77 U	27 U	6 U	29	65	300 U	54 J	8 U	650 U	42	2 U	660	660 U	#REF!	18 J	2.3 U	2.5 U	2.5 U	230 5.3	
11	101	Sediment	SVOA	108-95-2	Phenol	ug/Kg	130 U	46 U	11 U	14 U	13 U	300 U	51 J	410 U	1300 U		200 U	660	660 U	#REF!						
11	101	Sediment	SVOA	129-00-0	Pyrene	ug/Kg	180 U	61 U	14 J	44	53	300 U	68 J	19	650 U	48	86 J	660	660 U	#REF!	8.6 J	2.3 U	2.5 U	6.2	210 6.5	
11	101	Sediment	TIN	7429-90-5	Aluminum	mg/kg	17400	14300	17800	17600	17700	10700	21900	17200	14300		19100			#REF!						
11	101	Sediment	TIN	7440-36-0	Antimony	mg/kg	2.4 UJ	3.9 UJ	4 UJ	5 J	4.9 UJ	10 U	1.3 J	0.14 U	0.296 U		1.43 UJ	0.5	0.5 UJ	#REF!	0.054 UJ	0.11 UJ	0.70 J	0.118 J	0.103 J 0.098 UJ	0.078 U
11	101	Sediment	TIN	7440-38-2	Arsenic	mg/kg	2.7	8.6 J	1.9 J	2.2	2.7 J	3	5.8 J	2.7	3.99		3.64 J	4.3	4.3	#REF!	8.2	2.3	4.2 J	6.09	5.48 5.32	4.77
11	101	Sediment	TIN	7440-39-3	Barium	mg/kg	22.5 J	23.3 U	25.2 J	26.4 J	17.9 J	41	47.2	22.4	24		24.5			#REF!						
11	101	Sediment	TIN	7440-41-7	Beryllium	mg/kg	0.22 J	0.17 J	0.12 J	0.12 U	0.05 U	1 U	0.14 J	0.05 U	0.12		0.858 U	0.147	0.147 J	#REF!	0.34 J	0.121	0.102 J			
11	101	Sediment	TIN	7440-43-9	Cadmium	mg/kg	0.52 U	0.77 UJ	0.55 U	0.65 U	0.67 U	1 U	0.04 U	0.03 U	0.197 U		0.572 U	0.5	0.5 U	#REF!	1.1 J	0.031	0.120 J			
11	101	Sediment	TIN	7440-70-2	Calcium	mg/kg	7070	9240 J	8610	8250	9760 J	4770	11800	7880	6870		8400			#REF!						
11	101	Sediment	TIN	7440-47-3	Chromium	mg/kg	20 J	13.1 J	18.2	13 J	12.2	8	11.5	16.7	9.03		10.6	6.71	6.71	#REF!	14.7	6.02	8.02 J	4.81		
11	101	Sediment	TIN	7440-48-4	Cobalt	mg/kg	11	9 J	11.3	9.3 J	10.3 J	7	15.7	12.4	7.53		8.53			#REF!						
11	101	Sediment	TIN	7440-50-8	Copper	mg/kg	34.6 J	20.3 J	27.2 J	34.8	127 J	22	30.7	44.2	17.2		40.8 J	29.9	29.9	#REF!	55.9	28.5 J	18.5 J			
11	101	Sediment	TIN	7439-89-6	Iron	mg/kg	27100	33700	26800	24300	26700	26400	48400	30300	30700		34000			#REF!						
11	101	Sediment	TIN	7439-92-1	Lead	mg/kg	4.2 J	5.9 J	4.1 J	6	4.7	6	8.1 J	4.7	13.8		4.55	5.24	5.24	#REF!	6.5	7.47 J	2.89 J			
11	101	Sediment	TIN	7439-95-4	Magnesium	mg/kg	11800	12300	9480	8050	9520	5560	5180	10100	4600					#REF!						
11	101	Sediment	TIN	7439-96-5	Manganese	mg/kg	537	979	526	709	342	565	834	452	819		438			#REF!						
11	101	Sediment	TIN	7439-97-6	Mercury	mg/kg	0.04 U	0.04 UJ	0.05 UJ	0.06 U	0.05 UJ	0.2 U	0.08 U	0.03 U			0.047 U	0.013	0.0127 J	0.0103 J	0.0184 J	0.030	0.013 J			
11	101	Sediment	TIN	7440-02-0	Nickel	mg/kg	18.8	11.8 J	12.5	15.3	13	10 U	9.2	18.2	7.3		13.4 J	9.13	9.13	#REF!	12.6	3.62	8.48 J	5.30	4.94 J 4.99 J	5.23
11	101	Sediment	TIN	7440-09-7	Potassium	mg/kg	191 U	353 U	395 U	307 U	345 U	400 U	423 J	773	228		360			#REF!						
11	101	Sediment	TIN	7782-49-2	Selenium	mg/kg	0.16 U	0.15 UJ	0.17 U	0.1 U	0.18 U	1 U	4.6 J	1.2	0.987 U		2.86 U	0.5	0.5 U	#REF!	1.0 J	2.4 U	2.3 UJ			
11	101	Sediment	TIN	7440-22-4	Silver	mg/kg	0.61 J	0.9 U	0.54 U	0.89 U	0.92 U	2 U	0.07 U	0.06 U	0.0987 U		0.572 U	0.5	0.5 U	#REF!	0.14 J	0.036 J	0.06 UJ			
11	101	Sediment	TIN	7440-23-5	Sodium	mg/kg	878 J	881 J	1230	1230	1160 J	480	1970	1200			1900			#REF!						
11	101	Sediment	TIN	7440-28-0	Thallium	mg/kg	0.2 UJ	0.13 J	0.19 UJ	0.14 U	0.22 UJ	1 U	0.49 U	0.66 J	0.102		0.715 U	0.5	0.5 U	#REF!	0.34 J	0.120	0.050			
11	101	Sediment	TIN	7440-62-2	Vanadium	mg/kg	64.1	76.3 J	77.5	65.1	63.3	56	147	81.8	90.7		74.5			#REF!						

Table C-2-A
Summary of Chemicals for Sediment at Palisades Landfill

SWMU	Location Cross Reference	Matrix	Method Class		Analyte	Units	Concentration																			
							5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003		9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	8/2011
11	101	Sediment	TIN	7440-66-6	Zinc	mg/kg	88.4 J	87.5	73.3	79.7	59.7 J	120	151	59.5	93.3		71.3	76.6	76.6	#REF!	107	30.9 J	45.9 J			
11	102	Sediment	P/A	72-54-8	4,4-DDD	ug/Kg	4.6 U	0.28 U	0.63	1.7 J	0.72 NJ		4.5 U	15 J	24 U	3.5 U				#REF!						
11	102	Sediment	P/A	72-55-9	4,4-DDE	ug/Kg	4.6 U	0.28 U	0.092 J	0.27 NJ	0.18 NJ		4.5 U	1 U	24 U	2.1 U				#REF!						
11	102	Sediment	P/A	50-29-3	4,4-DDT	ug/Kg	4.6 U	1.5 J	0.79 NJ	2.1 J	0.93 NJ		4.5 U	1 U	24 U	2.5 U				#REF!						
11	102	Sediment	P/A	309-00-2	Aldrin	ug/Kg	2.3 U	0.14 U	0.16 U	0.13 U	0.17 U		2.3 U	0.52 U	24 U	3.1 U				#REF!						
11	102	Sediment	P/A	319-84-6	alpha-BHC	ug/Kg	2.3 U	0.14 NJ	0.031 J	0.13 U	0.17 U		2.3 U	0.52 U	24 U	2.3 U				#REF!						
11	102	Sediment	P/A	5103-71-9	alpha-Chlordane	ug/Kg	2.3 U	0.14 U	0.16 U	0.16 NJ	0.17 U		2.3 U	0.52 U	24 U	2.5 U				#REF!						
11	102	Sediment	P/A	12674-11-2	Aroclor 1016	ug/Kg	46 U	0.55 U	3.2 U	2.6 U	3.4 U		45 U	10 U	47.9 U	10 U	14 U	40.8	40.8 U	#REF!	47 U		7.2 U		10 U	
11	102	Sediment	P/A	11104-28-2	Aroclor 1221	ug/Kg	93 U	5.5 U	6.4 U	5.3 U	6.8 U		90 U	20 U	47.9 U	10 U	14 U	82.1	82.1 U	#REF!	47 U		15 U		20 U	
11	102	Sediment	P/A	11141-16-5	Aroclor 1232	ug/Kg	46 U	2.8 U	3.2 U	2.6 U	3.4 U		45 U	10 U	47.9 U	10 U	14 U	40.8	40.8 U	#REF!	47 U		7.2 U		10 U	
11	102	Sediment	P/A	53469-21-9	Aroclor 1242	ug/Kg	46 U	2.8 U	3.2 U	2.6 U	3.4 U		45 U	10 U	47.9 U	10 U	14 U	40.8	40.8 U	#REF!	47 U		7.2 U		10 U	
11	102	Sediment	P/A	12672-29-6	Aroclor 1248	ug/Kg	46 U	2.8 U	3.2 U	2.6 U	3.4 U		45 U	10 U	47.9 U	10 U	14 U	40.8	40.8 U	#REF!	47 U		7.2 U		10 U	
11	102	Sediment	P/A	11097-69-1	Aroclor 1254	ug/Kg	46 U	2.8 U	3.2 U	2.6 U	3.4 U		45 U	10 U	78.7	10 U	14 U	40.8	40.8 U	#REF!	47 U		7.2 U		10 U	
11	102	Sediment	P/A	11096-82-5	Aroclor 1260	ug/Kg	46 U	31 NJ	110	20 NJ	17 J		45 U	41	98.6	10 U	14 U	33.6	33.6 J	#REF!	300		1.5 J		150	
11	102	Sediment	P/A		Sum of Aroclors	ug/Kg																	1.5 J		150	
11	102	Sediment	P/A	319-85-7	beta-BHC	ug/Kg	2.3 U	0.14 U	0.16 U	0.13 U	0.17 U		2.3 U	0.52 U	24 U	0.75 J				#REF!						
11	102	Sediment	P/A	57-74-9	Chlordane	ug/Kg										2.5 U				#REF!						
11	102	Sediment	P/A	-73	Chlordane (total)	ug/Kg	2.3 U	0.14 U	0.16 U	0.236	0.084									#REF!						
11	102	Sediment	P/A	-62	DDT (total)	ug/Kg	4.6 U	1.5	1.512	4.07	1.83									#REF!						
11	102	Sediment	P/A	319-86-8	delta-BHC	ug/Kg	2.3 U	0.14 U	0.16 U	0.07 NJ	0.045 NJ		2.3 U	0.52 U	24 U	3.6 U				#REF!						
11	102	Sediment	P/A	60-57-1	Dieldrin	ug/Kg	4.6 U	0.28 U	0.48 NJ	0.26 U	0.46 NJ		4.5 U	1 U	24 U	2.3 U				#REF!						
11	102	Sediment	P/A	-74	Endosulfan (total)	ug/Kg	4.6 U	0.14	3.6	0.47	0.34									#REF!						
11	102	Sediment	P/A	959-98-8	Endosulfan I	ug/Kg	2.3 U	0.14 U	0.16 U	0.13 U	0.17 U		2.3 U	0.52 U	24 U	1.9 U				#REF!						
11	102	Sediment	P/A	33213-65-9	Endosulfan II	ug/Kg	4.6 U	0.14 J	3.6 NJ	0.47 NJ	0.34 NJ		4.5 U	1 U	24 U	3 U				#REF!						
11	102	Sediment	P/A	1031-07-8	Endosulfan sulfate	ug/Kg	4.6 U	0.28 U	0.32 U	0.26 U	0.34 U		4.5 U	1 U	24 U	0.33 J				#REF!						
11	102	Sediment	P/A	72-20-8	Endrin	ug/Kg	4.6 UJ	0.53 J	1.8 NJ		0.43 NJ		4.5 U	1 U	24 U	5 U				#REF!						
11	102	Sediment	P/A	7421-93-4	Endrin Aldehyde	ug/Kg	4.6 U	1.5 J	0.5 NJ	1.1 NJ	1 NJ		4.5 U	1 U	24 U	7.8 U				#REF!						
11	102	Sediment	P/A	53494-70-5	Endrin ketone	ug/Kg	4.6 U	0.28 U	0.32 U	0.26 U	0.36 NJ		4.5 U	2.1 J	24 U	1.4 U				#REF!						
11	102	Sediment	P/A	5103-74-2	gamma-Chlordane	ug/Kg	2.3 U	0.14 U	0.16 U	0.076 J	0.084 NJ		2.3 U	0.52 U	24 U	3.8 U				#REF!						
11	102	Sediment	P/A	76-44-8	Heptachlor	ug/Kg	2.3 U	0.29 J	0.069 J	0.13 U	0.17 U		2.3 U	0.52 U	24 U	8.9 U				#REF!						
11	102	Sediment	P/A	1024-57-3	Heptachlor epoxide	ug/Kg	2.3 U	0.14 U	0.039 J	0.13 U	0.082 J		2.3 U	0.52 U	24 U	5 U				#REF!						
11	102	Sediment	P/A	58-89-9	Lindane	ug/Kg	2.3 U	0.14 U	0.16 U	0.13 U	0.17 U		2.3 U	0.52 U	24 U	5.9 U				#REF!						
11	102	Sediment	P/A	72-43-5	Methoxychlor	ug/Kg	23 U	1.4 U	0.32 U	0.26 U	0.34 U		23 U	5.2 U	24 U	11 U				#REF!						
11	102	Sediment	P/A	-65	PCB (Sum Detect + .5 NonDetect)	ug/Kg	93 U	31	110	20	17									#REF!						
11	102	Sediment	P/A	12789-03-6	Technical Chlordane	ug/Kg					6.8 U									#REF!						
11	102	Sediment	P/A	8001-35-2	Toxaphene	ug/Kg	230 U	14 U	16 U	13 U	17 U		230 U	52 U	1600 U	18 U				#REF!						
11	102	Sediment	SVOA	120-82-1	1,2,4-Trichlorobenzene	ug/Kg	78 U	24 U	6 U	44 U	57 U		460 U	510 U	1590 U		190 U			#REF!						
11	102	Sediment	SVOA	95-50-1	1,2-Dichlorobenzene	ug/Kg	91 U	28 U	8 U	52 U	66 U		460 U	510 U	1590 U		220 U			#REF!						
11	102	Sediment	SVOA	122-66-7	1,2-Diphenylhydrazine	ug/Kg							460 U							#REF!						
11	102	Sediment	SVOA	541-73-1	1,3-Dichlorobenzene	ug/Kg	91 U	28 U	8 U	52 U	66 U		460 U	510 U	1590 U		220 U			#REF!						
11	102	Sediment	SVOA	106-46-7	1,4-Dichlorobenzene	ug/Kg	78 U	24 U	6 U	44 U	57 U		460 U	510 U	1590 U					#REF!						
11	102	Sediment	SVOA	108-60-1	2,2-oxybis(1-Chloropropane)	ug/Kg	220 U	69 U	18 U	120 U	160 U		460 U	510 U	1590 U		240 U			#REF!						
11	102	Sediment	SVOA	95-95-4	2,4,5-Trichlorophenol	ug/Kg	130 U	40 U	11 U	74 U	95 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	88-06-2	2,4,6-Trichlorophenol	ug/Kg	140 U	44 U	12 U	81 U	100 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	120-83-2	2,4-Dichlorophenol	ug/Kg	130 U	40 U	11 U	74 U	95 U		460 U	510 U	1590 U		180 U			#REF!						
11	102	Sediment	SVOA	105-67-9	2,4-Dimethylphenol	ug/Kg	180 U	57 U	15 U	100 U	130 U		460 U	510 U	1590 U		180 U			#REF!						
11	102	Sediment	SVOA	51-28-5	2,4-Dinitrophenol	ug/Kg	220 UJ	69 U	18 U	120 UJ	160 U		910 U	1000 U	9570 U		1200 U			#REF!						
11	102	Sediment	SVOA	121-14-2	2,4-Dinitrotoluene	ug/Kg	220 U	69 U	18 U	120 U	160 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	606-20-2	2,6-Dinitrotoluene	ug/Kg	190 U	61 U	16 U	110 U	140 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	91-58-7	2-Chloronaphthalene	ug/Kg	100 U	32 U	9 U	59 U	76 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	95-57-8	2-Chlorophenol	ug/Kg	100 U	32 U	9 U	59 U	76 U		460 U	510 U	1590 U		180 U			#REF!						
11	102	Sediment	SVOA	91-57-6	2-Methylnaphthalene	ug/Kg	210 U	65 U	17 U	120 U	150 U		460 U	14	1120 U	18 U	17 U			#REF!	31 J	4.3	0.56 J	14	12	
11	102	Sediment	SVOA	95-48-7	2-Methylphenol	ug/Kg	210 U	65 U	17 U	120 U	150 U		460 U	510 U	1590 U		180 U	328	328 U	#REF!						
11	102	Sediment	SVOA	88-74-4	2-Nitroaniline	ug/Kg	180 U	57 U	15 U	100 UJ	130 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	88-75-5	2-Nitrophenol	ug/Kg	130 U	40 U	11 U	74 U	95 U		460 U	510 U	1590 U		180 U			#REF!						
11	102	Sediment	SVOA	91-94-1	3,3-Dichlorobenzidine	ug/Kg	100 U	32 U	9 U	59 UJ	76 U		910 U	510 U	1590 U		180 U			#REF!						
11	102	Sediment	SVOA	99-09-2	3-Nitroaniline	ug/Kg	160 U	48 UJ	13 U	88 U	110 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	534-52-1	4,6-Dinitro-2-methylphenol	ug/Kg	190 U	61 U	16 U	110 U	140 U		910 U	510 U	9570 U		180 U			#REF!						
11	102	Sediment	SVOA	101-55-3	4-Bromophenyl-phenylether	ug/Kg	130 U	40 U	11 U	74 U	95 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	59-50-7	4-Chloro-3-methylphenol	ug/Kg	320 U	100 U	27 U	180 U	240 U		460 U	510 U	1590 U		180 U			#REF!						
11	102	Sediment	SVOA	106-47-8	4-Chloroaniline	ug/Kg	230 U	73 U	20 U	130 U	170 U		460 U	510 U	1590 U		290 U			#REF!						
11	102	Sediment	SVOA	98-57-7	4-Chlorophenyl methylsulfone	ug/Kg											180 U			#REF!						
11	102	Sediment	SVOA	7005-72-3	4-Chlorophenyl-phenylether	ug/Kg	140 U	44 U	12 U	81 U	100 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	106-44-5	4-Methylphenol	ug/Kg	260 U	81 U	22 U	150 U	190 U		460 U	510 U			180 U			#REF!						
11	102	Sediment	SVOA	100-01-6	4-Nitroaniline	ug/Kg	170 U	52 U	14 U	96 UJ	120 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	100-02-7	4-Nitrophenol	ug/Kg	210 U	65 U	17 U	120 U	150 U		910 U	510 U	7970 U		180 U			#REF!						
11	102	Sediment	SVOA	83-32-9	Acenaphthene	ug/Kg	91 U	22 J	8 U	52 U	66 U		460 U	10 U	797 U	1.9 U	1.8 U	1620	1620 U	#REF!	7.6 J	1.9 J	2.5 U	14	11	
11	102	Sediment	SVOA	208-96-8	Acenaphthylene	ug/Kg	100 U	32 U	9 U	59 U	76 U		460 U	10 U	797 U	2.2 U	2.1 U			#REF!	19 U	3.6	2.5 U	10	9.1	
11	102	Sediment	SVOA	62-53-3	Aniline	ug/Kg							460 U		3190 U		180 U			#REF!						
11	102	Sediment	SVOA	120-12-7	Anthracene	ug/Kg	91 U	24 J	8 U	30 J	66 U		460 U	120 J	797 U	1.9 U	1.8 U	1620	1620 U	#REF!	21 J	21	2.5 U	44	36	

Table C-2-A
Summary of Chemicals for Sediment at Palisades Landfill

SWMU	Location Cross Reference	Matrix	Method Class		Analyte	Units	Concentration																			
							5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003		9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	8/2011
11	102	Sediment	SVOA	103-33-3	Azobenzene	ug/Kg									797 U					#REF!						
11	102	Sediment	SVOA	92-87-5	Benzidine	ug/Kg							2300 U							#REF!						
11	102	Sediment	SVOA	56-55-3	Benzo(a)anthracene	ug/Kg	200	58	8 U	240	66 U		460 U	260 J	797 U	1.9 J	1.8 U	1620	1620 U	#REF!	85 J	81	0.41 J	180	160	
11	102	Sediment	SVOA	50-32-8	Benzo(a)pyrene	ug/Kg	110	23 J	8 U	250	33 J		460 U	190 J	797 U	3.2 U	3 U	63.8	63.8	#REF!	88 J	98	0.79 J	180	180	
11	102	Sediment	SVOA	205-99-2	Benzo(b)fluoranthene	ug/Kg	280	57	10 U	180	50 J		460 U	240 J	1120 U	1.9 J	1.8 U	1620	1620 U	#REF!	110 J	130	1.3 J	250	270	
11	102	Sediment	SVOA	191-24-2	Benzo(g,h,i)perylene	ug/Kg	62 J	16 J	15 U	62 J	130 U		460 U	120 J	1120 U	2.7	1.8 U	1620	1620 U	#REF!	170 J	51	2.4 J	130	160	
11	102	Sediment	SVOA	207-08-9	Benzo(k)fluoranthene	ug/Kg	96 J	16 J	9 U	200	76 U		460 U	10 U	797 U	1.9 U	1.8 U	1620	1620 U	#REF!	35 J	42	2.5 U	82	80	
11	102	Sediment	SVOA	-66	Benzofluoranthenes (total)	ug/Kg	376	73	10 U	380	50									#REF!						
11	102	Sediment	SVOA	65-85-0	Benzoic acid	ug/Kg							36 J		7970 U		1400 U	4900	4900 U	#REF!						
11	102	Sediment	SVOA	100-51-6	Benzyl alcohol	ug/Kg							460 U		1120 U		180 U			#REF!						
11	102	Sediment	SVOA	111-91-1	bis(2-Chloroethoxy)methane	ug/Kg	180 U	57 U	15 U	100 U	130 U		460 U	510 U	1120 U		210 U			#REF!						
11	102	Sediment	SVOA	111-44-4	bis(2-Chloroethyl)ether	ug/Kg	140 U	44 U	12 U	81 U	100 U		460 U	510 U	1590 U		220 U			#REF!						
11	102	Sediment	SVOA	117-81-7	bis(2-Ethylhexyl)phthalate	ug/Kg	270 J	130 U	36 U	28 J	320 U		37 J	150 J	797 U		180 U	9800	9800 U	#REF!	33 U	11 J	6.1 J	41 J	1000 U	
11	102	Sediment	SVOA	85-68-7	Butylbenzylphthalate	ug/Kg	220 U	69 U	18 U	120 U	160 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	86-74-8	Carbazole	ug/Kg	100 U	52 J	9 U	31 J	76 U		460 U	510 U				1620	1620 U	#REF!						
11	102	Sediment	SVOA	218-01-9	Chrysene	ug/Kg	240	100	10 U	260	34 J		27 J	270 J	797 U	2.3	1.8 U	1620	1620 U	#REF!	94 J	71	1.1 J	270	120	
11	102	Sediment	SVOA	-61	CPAH (total)	ug/Kg	997	269	22 U	1240	117									#REF!						
11	102	Sediment	SVOA	53-70-3	Dibenz(a,h)anthracene	ug/Kg	260 U	81 U	22 U	150 U	190 U		460 U	10 U	1120 U	1.9 U	1.8 U			#REF!	19 U	13	2.5 U	31	43	
11	102	Sediment	SVOA	132-64-9	Dibenzofuran	ug/Kg	100 U	17 J	9 U	59 U	76 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	84-66-2	Diethylphthalate	ug/Kg	190 U	61 U	16 U	110 U	140 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	131-11-3	Dimethylphthalate	ug/Kg	65 U	20 U	5 U	37 U	48 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	84-74-2	Di-n-butylphthalate	ug/Kg	76 J	57 U	15 U	100 U	46 J		460 U	510 U	797 U		310	4900	4900 U	#REF!						
11	102	Sediment	SVOA	117-84-0	Di-n-octylphthalate	ug/Kg	430	61 U	16 UJ	110 UJ	140 U		460 U	510 U	797 U		180 U	1620	1620 U	#REF!						
11	102	Sediment	SVOA	206-44-0	Fluoranthene	ug/Kg	630	480	10	340	58 J		460 U	590	797 U	2.7	2.1 U	1620	1620 U	#REF!	110 J	87	0.91 J	280 J	220	
11	102	Sediment	SVOA	86-73-7	Fluorene	ug/Kg	120 U	39	10 U	66 U	86 U		460 U	10 U	797 U	1.9 U	1.8 U	1620	1620 U	#REF!	13 J	4.5	2.5 U	23	17	
11	102	Sediment	SVOA	118-74-1	Hexachlorobenzene	ug/Kg	260 U	81 U	22 U	150 U	190 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	87-68-3	Hexachlorobutadiene	ug/Kg	310 U	97 U	26 U	180 U	230 U		460 U	510 U	3190 U		220 U			#REF!						
11	102	Sediment	SVOA	77-47-4	Hexachlorocyclopentadiene	ug/Kg	65 U	20 U	5 U	37 U	48 U		460 U	510 U	1590 U		180 U			#REF!						
11	102	Sediment	SVOA	67-72-1	Hexachloroethane	ug/Kg	91 U	28 U	8 U	52 U	66 U		460 U	510 U	1590 U		190 U			#REF!						
11	102	Sediment	SVOA	-63	HPAH (total)	ug/Kg	2269	1055	10	1982	228									#REF!						
11	102	Sediment	SVOA	193-39-5	Indeno(1,2,3-cd)pyrene	ug/Kg	71 J	15 J	12 U	110	100 U		460 U	16	797 U	1.9 U	1.8 U	30.9	30.9	#REF!	130 J	58	0.98 J	130	170	
11	102	Sediment	SVOA	78-59-1	Isophorone	ug/Kg	260 U	81 U	22 U	150 U	190 U		460 U	510 U	797 U		180 U			#REF!						
11	102	Sediment	SVOA	-64	LPAH (total)	ug/Kg	140	585	10 U	140	57									#REF!						
11	102	Sediment	SVOA	-160	m,p-Cresols	ug/Kg									7970 U					#REF!						
11	102	Sediment	SVOA	91-20-3	Naphthalene	ug/Kg	100 U	32 U	9 U	59 U	76 U		460 U	110 J	1590 U	2.3	1.8 U			#REF!	51 J	5.4	0.99 J	16	13	
11	102	Sediment	SVOA	-150	NCPAH (total)	ug/Kg	1412	1371	10	882	168									#REF!						
11	102	Sediment	SVOA	98-95-3	Nitrobenzene	ug/Kg	160 U	48 U	13 U	88 U	110 U		460 U	510 U	1590 U		180 U			#REF!						
11	102	Sediment	SVOA	62-75-9	N-Nitrosodimethylamine	ug/Kg									1120 U					#REF!						
11	102	Sediment	SVOA	621-64-7	N-Nitrosodinpropylamine	ug/Kg	390 U	120 U	32 U	220 U	280 U		460 U	510 U	1120 U		180 U			#REF!						
11	102	Sediment	SVOA	86-30-6	N-Nitrosodiphenylamine	ug/Kg	120 U	36 U	10 U	66 U	86 U		460 U	510 U	797 U		280 U			#REF!						
11	102	Sediment	SVOA	87-86-5	Pentachlorophenol	ug/Kg	180 U	57 U	15 U	100 U	130 U		910 U	510 U	7970 U		180 U	328	328 UJ	#REF!						
11	102	Sediment	SVOA	85-01-8	Phenanthrene	ug/Kg	140	500	8 U	110	57 J		460 U	790	797 U	3	1.8 U	1620	1620 U	#REF!	120 J	39	1.5 J	210	150	
11	102	Sediment	SVOA	108-95-2	Phenol	ug/Kg	160 U	48 U	13 U	88 U	110 U		460 U	510 U	1590 U		180 U	1620	1620 U	#REF!						
11	102	Sediment	SVOA	129-00-0	Pyrene	ug/Kg	580	290	17 U	340	53 J		460 U	560	797 U	2.3 U	2.2 U	1620	1620 U	#REF!	190 J	70	1.4 J	330 J	210	
11	102	Sediment	TIN	7429-90-5	Aluminum	mg/kg	12700	16100	17900	15300	20800		10400	15800	15700		16900			#REF!						
11	102	Sediment	TIN	7440-36-0	Antimony	mg/kg	3.1 UJ	5.7 J	4.6 UJ	5.5 J	5.8 UJ		2.7 J	0.17 U	6.1		1.58	1.03	1.03 J	#REF!	0.85 UJ	2.51 J	1.780 J	2.240 J	2.16 J	2.43 1.99
11	102	Sediment	TIN	7440-38-2	Arsenic	mg/kg	12.4	20.2 J	9.5 J	9.5	15.5 J		11.4 J	19.4	25.5		32.8	10.4	10.4	#REF!	8.0	9.4	17.1 J	9.95	6.57	8.86 6.38
11	102	Sediment	TIN	7440-39-3	Barium	mg/kg	76.5	73.8	30.5 J	104	102		64.3	77.2	88.6		75.6			#REF!						
11	102	Sediment	TIN	7440-41-7	Beryllium	mg/kg	0.23 J	0.22 J	0.14 J	0.19 U	0.26 U		0.09 J	0.06 U	0.144 U		0.799 U	0.27	0.27 J	#REF!	0.24 J	0.199	0.184 J			
11	102	Sediment	TIN	7440-43-9	Cadmium	mg/kg	1.4 J	2 J	0.72 J	1.8	3.3		0.26 J	5	0.646		2.21	2.59	2.59	#REF!	3.6	2.090	1.610 J			
11	102	Sediment	TIN	7440-70-2	Calcium	mg/kg	4120	6220 J	7770	887 J	163 J		4050	5910	7510		3600			#REF!						
11	102	Sediment	TIN	7440-47-3	Chromium	mg/kg	30 J	26.6 J	16.2	40.7 J	29.2		16	42.8	66.7		95.2	25	25	#REF!	28.2	22.1	1.08 J			
11	102	Sediment	TIN	7440-48-4	Cobalt	mg/kg	15.3	18.6	14.1	17.5	22		13.8	19.8	20.3		30.9			#REF!						
11	102	Sediment	TIN	7440-50-8	Copper	mg/kg	134 J	135 J	52.4 J	119	164 J		111	157	247		415	121	121	#REF!	101	85.6 J	38.1 J			
11	102	Sediment	TIN	7439-89-6	Iron	mg/kg	94400	92800	57700	100000	133000		105000	160000	193000		92000			#REF!						
11	102	Sediment	TIN	7439-92-1	Lead	mg/kg	121 J	87.5 J	139 J	200	275 J		60.9	287	377		132	208	208	#REF!	253	183 J	42.6 J			
11	102	Sediment	TIN	7439-95-4	Magnesium	mg/kg	9170	8680	7710	9260	12900		7180	5880	4560					#REF!						
11	102	Sediment	TIN	7439-96-5	Manganese	mg/kg	2350	2230	800	1610	2010		2430	2020	2880		2520			#REF!						
11	102	Sediment	TIN	7439-97-6	Mercury	mg/kg	0.06 U	0.04 UJ	0.06 UJ	0.06 U	0.06 UJ		0.05 U	0.05			0.044 U	0.295	0.295	0.108	0.235 J	0.077	0.007 J			
11	102	Sediment	TIN	7440-02-0	Nickel	mg/kg	33.3	45.8 J	18.2	36.3	49.2		32.4	53.2	92.7		125	39	39	#REF!	22.1	33.4	8.10 J	27.5	19.8 J	31.5 5.77
11	102	Sediment	TIN	7440-09-7	Potassium	mg/kg	431 U	358 U	344 U	314 U	1060 U		365 J	676	286		580			#REF!						
11	102	Sediment	TIN	7782-49-2	Selenium	mg/kg	0.22 J	0.17 J	0.18 U	0.3 U	0.18 U		6.9 J	2.5	1.44 U		2.66 U	1.51	1.51	#REF!	1.6	1.9 U	2.0 UJ			
11	102	Sediment	TIN	7440-22-4	Silver	mg/kg	1.5 J	1.2 U	0.44 U	0.91 U	1.1 U		0.04 U	0.08 U	0.336		0.429 J	0.319	0.319 J	#REF!	1.9	0.153 J	0.08 J			
11	102	Sediment	TIN	7440-23-5	Sodium	mg/kg	393 J	759 J	1140 J	721 J	776 J		312 J	1060			510			#REF!						
11	102	Sediment	TIN	7440-28-0	Thallium	mg/kg	0.24 UJ	0.14 U	0.21 UJ	0.18 U	0.23 UJ		2.7 U	3.8 U	0.0616		0.666 U	1.23	1.23 U	#REF!	0.14 UJ	0.078	0.075			

Table C-2-A
Summary of Chemicals for Sediment at Palisades Landfill

SWMU	Location Cross Reference	Matrix	Method Class		Analyte	Units	Concentration																			
							5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003		9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	8/2011
11	102	Sediment	TIN	7440-62-2	Vanadium	mg/kg	33.1	60.2 J	98.1	48.7	59.9		36.6	50.9	67.9		41.8			#REF!						
11	102	Sediment	TIN	7440-66-6	Zinc	mg/kg	492 J	619	261	536	1280 J		506	1430	820		752	920	920	#REF!	772	809 J	369 J			
11	103	Marine Sediment	P/A	72-54-8	4,4-DDD	ug/Kg	4.6 U		0.28 U	0.22 U	0.33 U	10000 U	4 U	0.78 U	19 U	3.9 U				#REF!						
11	103	Marine Sediment	P/A	72-55-9	4,4-DDE	ug/Kg	4.6 U		0.28 U	0.11 U	0.16 U	10000 U	4 U	0.78 U	19 U	2.3 U				#REF!						
11	103	Marine Sediment	P/A	50-29-3	4,4-DDT	ug/Kg	4.6 U		0.14 NJ	0.22 U	0.33 U	10000 U	4 U	0.78 U	19 U	1.4 J				#REF!						
11	103	Marine Sediment	P/A	309-00-2	Aldrin	ug/Kg	2.3 U		0.14 U	0.11 U	0.16 U	10000 U	2 U	0.4 U	19 U	3.5 U				#REF!						
11	103	Marine Sediment	P/A	319-84-6	alpha-BHC	ug/Kg	2.3 U		0.14 U	0.11 U	0.16 U	10000 U	2 U	0.4 U	19 U	2.5 U				#REF!						
11	103	Marine Sediment	P/A	5103-71-9	alpha-Chlordane	ug/Kg	2.3 U		0.14 U	0.11 U	0.16 U	10000 U	2 U	0.4 U	19 U	2.7 U				#REF!						
11	103	Marine Sediment	P/A	12674-11-2	Aroclor 1016	ug/Kg	46 U		2.8 U	2.2 U	3.3 U	100 U	40 U	7.8 U	38.4 U	13 U	32 U	16.6	16.6 U	#REF!	21 U		6.9 U 6.5 U		6.3 U	
11	103	Marine Sediment	P/A	11104-28-2	Aroclor 1221	ug/Kg	92 U		5.7 U	4.5 U	6.5 U	100 U	80 U	16 U	38.4 U	13 U	32 U	33.5	33.5 U	#REF!	21 U		14 U 13 U		13 U	
11	103	Marine Sediment	P/A	11141-16-5	Aroclor 1232	ug/Kg	46 U		2.8 U	2.2 U	3.3 U	100 U	40 U	7.8 U	38.4 U	13 U	32 U	16.6	16.6 U	#REF!	21 U		6.9 U 6.5 U		6.3 U	
11	103	Marine Sediment	P/A	53469-21-9	Aroclor 1242	ug/Kg	46 U		2.8 U	2.2 U	3.3 U	100 U	40 U	7.8 U	38.4 U	13 U	32 U	16.6	16.6 U	#REF!	21 U		6.9 U 6.5 U		6.3 U	
11	103	Marine Sediment	P/A	12672-29-6	Aroclor 1248	ug/Kg	46 U		2.8 U	2.2 U	3.3 U	100 U	40 U	7.8 U	38.4 U	13 U	32 U	16.6	16.6 U	#REF!	21 U		6.9 U 6.5 U		6.3 U	
11	103	Marine Sediment	P/A	11097-69-1	Aroclor 1254	ug/Kg	46 U		2.8 U	2.2 U	3.3 U	100 U	40 U	7.8 U	38.4 U	13 U	32 U	16.6	16.6 U	#REF!	21 U		6.9 U 6.5 U		6.3 U	
11	103	Marine Sediment	P/A	11096-82-5	Aroclor 1260	ug/Kg	46 U		2.8 U	2.2 U	3.3 U	100 U	40 U	32	38.4 U	13 U	32 U	16.6	16.6 U	#REF!	21 U		6.9 U 6.5 U		6.3 U	
11	103	Marine Sediment	P/A	319-85-7	beta-BHC	ug/Kg	2.3 U		0.14 U	0.11 U	0.16 U	10000 U	2 U	0.4 U	19 U	0.97 J				#REF!						
11	103	Marine Sediment	P/A	57-74-9	Chlordane	ug/Kg										2.7 U				#REF!						
11	103	Marine Sediment	P/A	-73	Chlordane (total)	ug/Kg	2.3 U		0.14 U	0.11 U	0.16 U	10000 U	2							#REF!						
11	103	Marine Sediment	P/A	-62	DDT (total)	ug/Kg	4.6 U		0.14	0.22 U	0.33 U	10000 U	4							#REF!						
11	103	Marine Sediment	P/A	319-86-8	delta-BHC	ug/Kg	2.3 U		0.14 U	0.038 NJ	0.041 NJ	10000 U	2 U	0.4 U	19 U	8.2				#REF!						
11	103	Marine Sediment	P/A	60-57-1	Dieldrin	ug/Kg	4.6 U		0.28 U	0.22 U	0.33 U	10000 U	4 U	0.78 U	19 U	2.5 U				#REF!						
11	103	Marine Sediment	P/A	-74	Endosulfan (total)	ug/Kg	4.6 U		0.28 U	0.22 U	0.33 U	10000 U	2							#REF!						
11	103	Marine Sediment	P/A	959-98-8	Endosulfan I	ug/Kg	2.3 U		0.14 U	0.11 U	0.16 U	10000 U	2 U	0.4 U	19 U	2.1 U				#REF!						
11	103	Marine Sediment	P/A	33213-65-9	Endosulfan II	ug/Kg	4.6 U		0.28 U	0.22 U	0.33 U	10000 U	4 U	0.78 U	19 U	3.4 U				#REF!						
11	103	Marine Sediment	P/A	1031-07-8	Endosulfan sulfate	ug/Kg	4.6 U		0.28 U	0.22 U	0.33 U	10000 U	4 U	0.78 U	19 U	1.8 U				#REF!						
11	103	Marine Sediment	P/A	72-20-8	Endrin	ug/Kg	4.6 UJ		0.29 U	0.22 U	0.33 U	10000 U	4 U	0.78 U	19 U	5.6 U				#REF!						
11	103	Marine Sediment	P/A	7421-93-4	Endrin Aldehyde	ug/Kg	4.6 U		0.28 U	0.22 U	0.33 U	10000 U	4 U	0.78 U	19 U	8.7 U				#REF!						
11	103	Marine Sediment	P/A	53494-70-5	Endrin ketone	ug/Kg	4.6 U		0.096 NJ	0.22 U	0.33 U	10000 U	4 U	1.5 J	19 U	1.5 U				#REF!						
11	103	Marine Sediment	P/A	5103-74-2	gamma-Chlordane	ug/Kg	2.3 U		0.14 U	0.11 U	0.16 U	10000 U	2 U	0.4 U	19 U	4.3 U				#REF!						
11	103	Marine Sediment	P/A	76-44-8	Heptachlor	ug/Kg	2.3 U		0.031 J	0.11 U	0.16 U	10000 U	2 U	0.4 U	19 U	10 U				#REF!						
11	103	Marine Sediment	P/A	1024-57-3	Heptachlor epoxide	ug/Kg	2.3 U		0.14 U	0.11 U	0.16 U	10000 U	2 U	0.4 U	19 U	5.6 U				#REF!						
11	103	Marine Sediment	P/A	58-89-9	Lindane	ug/Kg	2.3 U		0.14 U	0.11 U	0.16 U	10000 U	2 U	0.4 U	19 U	6.6 U				#REF!						
11	103	Marine Sediment	P/A	72-43-5	Methoxychlor	ug/Kg	23 U		0.17 NJ	0.22 U	0.33 U	20000 U	20 U	4 U	19 U	12 U				#REF!						
11	103	Marine Sediment	P/A	-65	PCB (Sum Detect + .5 NonDetect)	ug/Kg	92 U		5.7 U	4.5 U	6.5 U	100 U	40							#REF!						
11	103	Marine Sediment	P/A	12789-03-6	Technical Chlordane	ug/Kg					6.5 U									#REF!						
11	103	Marine Sediment	P/A	8001-35-2	Toxaphene	ug/Kg	230 U		14 U	11 U	16 U	300000 U	200 U	40 U	1300 U	20 U				#REF!						
11	103	Marine Sediment	SVOA	120-82-1	1,2,4-Trichlorobenzene	ug/Kg	84 U		6 U	7 U	7 U	300 U	400 U	390 U	1310 U		230 U			#REF!						
11	103	Marine Sediment	SVOA	95-50-1	1,2-Dichlorobenzene	ug/Kg	98 U		7 U	8 U	8 U	300 U	400 U	390 U	1310 U		260 U			#REF!						
11	103	Marine Sediment	SVOA	122-66-7	1,2-Diphenylhydrazine	ug/Kg							400 U							#REF!						
11	103	Marine Sediment	SVOA	541-73-1	1,3-Dichlorobenzene	ug/Kg	98 U		7 U	8 U	8 U	300 U	400 U	390 U	1310 U		260 U			#REF!						
11	103	Marine Sediment	SVOA	106-46-7	1,4-Dichlorobenzene	ug/Kg	84 U		6 U	7 U	7 U	300 U	400 U	390 U	1310 U					#REF!						
11	103	Marine Sediment	SVOA	108-60-1	2,2-oxybis(1-Chloropropane)	ug/Kg	240 U		16 U	18 U	19 U	300 U	400 U	390 U	1310 U		280 U			#REF!						
11	103	Marine Sediment	SVOA	95-95-4	2,4,5-Trichlorophenol	ug/Kg	140 U		9 U	11 U	11 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	88-06-2	2,4,6-Trichlorophenol	ug/Kg	150 U		10 U	12 U	12 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	120-83-2	2,4-Dichlorophenol	ug/Kg	140 U		9 U	11 U	11 U	300 U	400 U	390 U	1310 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	105-67-9	2,4-Dimethylphenol	ug/Kg	200 U		13 U	15 U	16 U	300 U	400 U	390 U	1310 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	51-28-5	2,4-Dinitrophenol	ug/Kg	240 UJ		16 U	18 UJ	19 U	2000 U	800 U	780 U	7840 U		1400 U			#REF!						
11	103	Marine Sediment	SVOA	121-14-2	2,4-Dinitrotoluene	ug/Kg	240 U		16 U	18 U	19 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	606-20-2	2,6-Dinitrotoluene	ug/Kg	210 U		14 U	16 U	17 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	91-58-7	2-Chloronaphthalene	ug/Kg	110 U		8 U	9 U	9 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	95-57-8	2-Chlorophenol	ug/Kg	110 U		8 U	9 U	9 U	300 U	400 U	390 U	1310 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	91-57-6	2-Methylnaphthalene	ug/Kg	220 U		15 U	17 U	18 U	300 U	400 U	8 U	915 U	20 U	21 U			#REF!	8.3 U	0.51 J 2.7 U	2.5 U 2.5 U	1.5 U 1.6 U	0.65 J	
11	103	Marine Sediment	SVOA	95-48-7	2-Methylphenol	ug/Kg	220 U		15 U	6 J	18 U	300 U	400 U	390 U	1310 U		210 U	134	134 U	#REF!						
11	103	Marine Sediment	SVOA	88-74-4	2-Nitroaniline	ug/Kg	200 U		13 U	15 UJ	16 U	2000 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	88-75-5	2-Nitrophenol	ug/Kg	140 U		9 U	11 U	11 U	300 U	400 U	390 U	1310 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	91-94-1	3,3-Dichlorobenzidine	ug/Kg	110 U		8 U	9 UJ	9 U	2000 U	800 U	390 U	1310 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	99-09-2	3-Nitroaniline	ug/Kg	170 U		11 U	13 U	14 U	2000 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	534-52-1	4,6-Dinitro-2-methylphenol	ug/Kg	210 U		14 U	16 U	17 U	2000 U	800 U	390 U	7840 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	101-55-3	4-Bromophenyl-phenylether	ug/Kg	140 U		9 U	11 U	11 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	59-50-7	4-Chloro-3-methylphenol	ug/Kg	350 U		23 U	27 U	29 U	300 U	400 U	390 U	1310 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	106-47-8	4-Chloroaniline	ug/Kg	250 U		17 U	20 U	21 U	300 U	400 U	390 U	1310 U		340 U			#REF!						
11	103	Marine Sediment	SVOA	98-57-7	4-Chlorophenyl methylsulfone	ug/Kg											210 U			#REF!						
11	103	Marine Sediment	SVOA	7005-72-3	4-Chlorophenyl-phenylether	ug/Kg	150 U		10 U	12 U	12 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	106-44-5	4-Methylphenol	ug/Kg	280 U		19 U	22 U	23 U	300 U	400 U	390 U			210 U			#REF!						
11	103	Marine Sediment	SVOA	100-01-6	4-Nitroaniline	ug/Kg	180 U		12 U	14 UJ	15 U	2000 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	100-02-7	4-Nitrophenol	ug/Kg	220 U		15 U	17 U	18 U	2000 U	800 U	390 U	6530 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	83-32-9	Acenaphthene	ug/Kg	98 U		7 U	8 U	8 U	300 U	400 U	8 U	653 U	2.2 U	2.2 U	660	660 U	#REF!	8.3 U	2.6 U 2.7 U	2.5 U 2.5 U	1.5 U 1.6 U	0.83 J	
11	103	Marine Sediment	SVOA	208-96-8	Acenaphthylene	ug/Kg	110 U		8 U	9 U	9 U	300 U	400 U	8 U	653 U	2.4 U	2.4 U			#REF!	8.3 U	2.6 U 2.7 U	2.5 U 2.5 U	1.5 U 1.6 U	1.6 U	
11	103	Marine Sediment	SVOA	62-53-3	Aniline	ug/Kg						1000 U	400 U		2610 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	120-12-7	Anthracene	ug/Kg	98 U		7 U	8 U	8 U	300 U	400 U	8 U	653 U	2.2 U	2.2 U	660	660 U	#REF!	8.3 U	2.6 U 2.7 U	2.5 U 2.5 U	1.5 U 1.6 U	1.6 U	
11	103	Marine Sediment	SVOA	103-33-3	Azobenzene	ug/Kg									653 U					#REF!						

Table C-2-A
Summary of Chemicals for Sediment at Palisades Landfill

SWMU	Location Cross Reference	Matrix	Method Class		Analyte	Units	Concentration																			
							5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003		9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	8/2011
11	103	Marine Sediment	SVOA	92-87-5	Benzidine	ug/Kg							2000 U							#REF!						
11	103	Marine Sediment	SVOA	56-55-3	Benzo(a)anthracene	ug/Kg	98 U		7 U	8 U	8 U	300 U	400 U	21	653 U	2.2 J	12	660	660 U	#REF!	8.3 U	0.45 J 2.5 J	0.59 J 2.5 U	1.5 U 1.6 U	1.0 J	
11	103	Marine Sediment	SVOA	50-32-8	Benzo(a)pyrene	ug/Kg	98 U		7 U	8 U	8 U	300 U	400 U	16	653 U	3.6 U	12	19.9	19.9	#REF!	8.3 U	2.6 U 1.7 J	2.5 U 2.5 U	1.5 U 1.6 U	1.1 J	
11	103	Marine Sediment	SVOA	205-99-2	Benzo(b)fluoranthene	ug/Kg	130 U		8 U	10 U	10 U	300 U	400 U	38	915 U	6.5	2.2 U	660	660 U	#REF!	8.3 U	2.6 U 2.8	2.5 U 2.5 U	1.5 U 1.6 U	2.9	
11	103	Marine Sediment	SVOA	191-24-2	Benzo(g,h,i)perylene	ug/Kg	200 U		13 U	15 U	16 U	300 U	400 U	8 U	915 U	7.8	2.2 U	660	660 U	#REF!	8.3 U	2.6 U 0.72 J	2.5 U 2.5 U	1.5 U 1.6 U	1.4 J	
11	103	Marine Sediment	SVOA	207-08-9	Benzo(k)fluoranthene	ug/Kg	110 U		8 U	9 U	9 U	300 U	400 U	8 U	653 U	2.6	2.2 U	660	660 U	#REF!	8.3 U	2.6 U 0.84 J	2.5 U 2.5 U	1.5 U 1.6 U	0.91 J	
11	103	Marine Sediment	SVOA	-66	Benzofluoranthenes (total)	ug/Kg	130 U		8 U	10 U	10 U	300 U	400							#REF!						
11	103	Marine Sediment	SVOA	65-85-0	Benzoic acid	ug/Kg						2000 U	2000 U		6530 U		1700 U	2000	2000 U	#REF!						
11	103	Marine Sediment	SVOA	100-51-6	Benzyl alcohol	ug/Kg						300 U	400 U		915 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	111-91-1	bis(2-Chloroethoxy)methane	ug/Kg	200 U		13 U	15 U	16 U	300 U	400 U	390 U	915 U		240 U			#REF!						
11	103	Marine Sediment	SVOA	111-44-4	bis(2-Chloroethyl)ether	ug/Kg	150 U		10 U	12 U	12 U	300 U	400 U	390 U	1310 U		260 U			#REF!						
11	103	Marine Sediment	SVOA	117-81-7	bis(2-Ethylhexyl)phthalate	ug/Kg	82 J		31 U	13 J	11 U	300 U	400 U	390 U	653 U		210 U	4000	4000 U	#REF!	15 U	7.6 J 3.5 J	34 J 5.4 J	57 U 61 U	62 U	
11	103	Marine Sediment	SVOA	85-68-7	Butylbenzylphthalate	ug/Kg	240 U		16 U	18 U	19 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	86-74-8	Carbazole	ug/Kg	110 U		8 U	9 U	9 U		400 U	390 U				660	660 U	#REF!						
11	103	Marine Sediment	SVOA	218-01-9	Chrysene	ug/Kg	130 U		8 U	10 U	10 U	300 U	400 U	20	653 U	4.4	20	660	660 U	#REF!	8.3 U	2.6 U 1.0 J	0.50 J 2.5 U	1.5 U 1.6 U	2.8	
11	103	Marine Sediment	SVOA	-61	CPAH (total)	ug/Kg	280 U		19 U	22 U	23 U	300 U	400							#REF!						
11	103	Marine Sediment	SVOA	53-70-3	Dibenz(a,h)anthracene	ug/Kg	280 U		19 U	22 U	23 U	300 U	400 U	8 U	915 U	3	2.2 U			#REF!	8.3 U	2.6 U 2.7 U	2.5 U 2.5 U	1.5 U 1.6 U	1.6 U	
11	103	Marine Sediment	SVOA	132-64-9	Dibenzofuran	ug/Kg	110 U		8 U	9 U	9 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	84-66-2	Diethylphthalate	ug/Kg	210 U		14 U	16 U	17 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	131-11-3	Dimethylphthalate	ug/Kg	70 U		5 U	6 U	6 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	84-74-2	Di-n-butylphthalate	ug/Kg	200 U		13 U	15 U	16 U	300 U	400 U	79 J	653 U		220	2000	2000 U	#REF!						
11	103	Marine Sediment	SVOA	117-84-0	Di-n-octylphthalate	ug/Kg	87 J		14 U	16 UJ	17 U	300 U	400 U	390 U	653 U		210 U	660	660 U	#REF!						
11	103	Marine Sediment	SVOA	206-44-0	Fluoranthene	ug/Kg	98 U		7 U	8 U	8 U	300 U	400 U	29	653 U	12	99 J	660	660 U	#REF!	8.3 U	0.63 J 2.2 J	1.3 J 2.5 U	1.5 U 1.6 U	10	
11	103	Marine Sediment	SVOA	86-73-7	Fluorene	ug/Kg	130 U		8 U	10 U	10 U	300 U	400 U	8 U	653 U	2.2 U	2.2 U	660	660 U	#REF!	8.3 U	2.6 U 0.27 J	2.5 U 2.5 U	1.5 U 1.6 U	0.96 J	
11	103	Marine Sediment	SVOA	118-74-1	Hexachlorobenzene	ug/Kg	280 U		19 U	22 U	23 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	87-68-3	Hexachlorobutadiene	ug/Kg	340 U		22 U	26 U	27 U	300 U	400 U	390 U	2610 U		260 U			#REF!						
11	103	Marine Sediment	SVOA	77-47-4	Hexachlorocyclopentadiene	ug/Kg	70 U		5 U	6 U	6 U	300 U	400 U	390 U	1310 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	67-72-1	Hexachloroethane	ug/Kg	98 U		7 U	8 U	8 U	300 U	400 U	390 U	1310 U		230 U			#REF!						
11	103	Marine Sediment	SVOA	-63	HPAH (total)	ug/Kg	280 U		19 U	22 U	23 U	300 U	400							#REF!						
11	103	Marine Sediment	SVOA	193-39-5	Indeno(1,2,3-cd)pyrene	ug/Kg	150 U		10 U	12 U	12 U	300 U	400 U	8 U	653 U	3.9	2.2 U	7.66	7.66	#REF!	8.3 U	2.6 U 0.80 J	2.5 U 2.5 U	1.5 U 1.6 U	1.7	
11	103	Marine Sediment	SVOA	78-59-1	Isophorone	ug/Kg	280 U		19 U	22 U	23 U	300 U	400 U	390 U	653 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	-64	LPAH (total)	ug/Kg	130 U		8 U	10 U	10 U	300 U	400							#REF!						
11	103	Marine Sediment	SVOA	-160	m,p-Cresols	ug/Kg									6530 U					#REF!						
11	103	Marine Sediment	SVOA	91-20-3	Naphthalene	ug/Kg	110 U		8 U	9 U	9 U	300 U	400 U	8 U	1310 U	5.1	3.4			#REF!	8.3 U	2.6 U 2.7 U	0.70 J 0.49 J	1.5 U 1.6 U	0.77 J	
11	103	Marine Sediment	SVOA	-150	NCPAH (total)	ug/Kg	220 U		15 U	17 U	18 U	300 U	400							#REF!						
11	103	Marine Sediment	SVOA	98-95-3	Nitrobenzene	ug/Kg	170 U		11 U	13 U	14 U	300 U	400 U	390 U	1310 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	62-75-9	N-Nitrosodimethylamine	ug/Kg						2000 U			915 U					#REF!						
11	103	Marine Sediment	SVOA	621-64-7	N-Nitrosodinpropylamine	ug/Kg	420 U		28 U	33 U	34 U	300 U	400 U	390 U	915 U		210 U			#REF!						
11	103	Marine Sediment	SVOA	86-30-6	N-Nitrosodiphenylamine	ug/Kg	130 U		8 U	10 U	10 U	300 U	400 U	390 U	653 U		330 U			#REF!						
11	103	Marine Sediment	SVOA	87-86-5	Pentachlorophenol	ug/Kg	200 U		13 U	7 J	16 U	2000 U	800 U	390 U	6530 U		210 U	134	134 U	#REF!						
11	103	Marine Sediment	SVOA	85-01-8	Phenanthrene	ug/Kg	98 U		7 U	8 U	8 U	300 U	400 U	11	653 U	3.8	54 J	660	660 U	#REF!	8.3 U	0.46 J 1.5 J	0.37 J 2.5 U	1.5 U 1.6 U	12	
11	103	Marine Sediment	SVOA	108-95-2	Phenol	ug/Kg	170 U		11 U	13 U	14 U	300 U	400 U	390 U	1310 U		210 U	660	660 U	#REF!						
11	103	Marine Sediment	SVOA	129-00-0	Pyrene	ug/Kg	220 U		15 U	17 U	18 U	300 U	400 U	30	653 U	7.2	48 J	660	660 U	#REF!	8.3 U	2.6 U 1.7 J	1.0 J 2.5 U	1.5 U 1.6 U	8.3	
11	103	Marine Sediment	TIN	7429-90-5	Aluminum	mg/kg	19900		24800	17200	22000	12600	20700	15700	19000	14700	25700			#REF!						
11	103	Marine Sediment	TIN	7440-36-0	Antimony	mg/kg	3.5 J		3.7 J	3.6 UJ	4.5 UJ	10 U	0.54 J	0.13 U	0.36 U	0.479	1.51 U	0.5	0.5 UJ	#REF!	0.025 UJ	0.05 J 0.04 J	0.09 UJ 0.10 UJ	0.029 J 0.031 J	0.099 UJ	0.079 U
11	103	Marine Sediment	TIN	7440-38-2	Arsenic	mg/kg	4.1		4.3 J	4.5	4.9 J	3	4 J	4.2	3.87	9.89	5.74	3.83	3.83	#REF!	7.6 J	2.8 2.3	3.7 J 3.3 J	4.65 5.07	3.09	3.29
11	103	Marine Sediment	TIN	7440-39-3	Barium	mg/kg	13.5 J		16.2 J	16.8 J	16.8 J	8	14.8 J	38	10.9	103	11.8			#REF!						
11	103	Marine Sediment	TIN	7440-41-7	Beryllium	mg/kg	0.2 J		0.13 J	0.15 U	0.04 U	1 U	0.08 J	0.09 J	0.12 U	0.251	0.908 U	0.189	0.189 J	#REF!	0.31 J	0.097 0.099	0.100 0.098			
11	103	Marine Sediment	TIN	7440-43-9	Cadmium	mg/kg	0.58 U		0.44 U	0.92	0.61 U	1 U	0.02 U	0.81	0.24 U	2.67	0.605 U	0.5	0.5 U	#REF!	0.39 J	0.060 0.062	0.019 J 0.018 J			
11	103	Marine Sediment	TIN	7440-70-2	Calcium	mg/kg	18300		16300	21600	14400 J	8850	14500	15700	11500	5670	9800			#REF!						
11	103	Marine Sediment	TIN	7440-47-3	Chromium	mg/kg	3 J		5	8.8 J	3	3	5.7	4.5	4.42	25.7	6.18	6.41	6.41	#REF!	10.1	4.23 4.11	2.07 J 2.39 J	3.39 11.7		
11	103	Marine Sediment	TIN	7440-48-4	Cobalt	mg/kg	4.1 J		5.9 J	8 J	4.2 U	4	7.4	10.6	4.44	14.6	9.36			#REF!						
11	103	Marine Sediment	TIN	7440-50-8	Copper	mg/kg	14.1 J		13.5 J	37.4	12.6 J	9	12.2	72	11.3	82	29.5	19.5	19.5	#REF!	26.6	10.5 J 10.6 J	8.03 J 8.83 J			
11	103	Marine Sediment	TIN	7439-89-6	Iron	mg/kg	12800		19500	20800	14900	9600	20700	26300	17000	117000	26000			#REF!						
11	103	Marine Sediment	TIN	7439-92-1	Lead	mg/kg	2.1 J		1.9 J	6	2.3	2	1.1 J	139	1.64	210	4	6.79	6.79	#REF!	8.7	2.58 J 2.63 J	1.70 J 1.76 J			
11	103	Marine Sediment	TIN	7439-95-4	Magnesium	mg/kg	4220		4350	9520	4380	3560	3980	10000	3680	9390				#REF!						
11	103	Marine Sediment	TIN	7439-96-5	Manganese	mg/kg	216		258	524	208	148	241	986	227	2100	489			#REF!						
11	103	Marine Sediment	TIN	7439-97-6	Mercury	mg/kg	0.05 U		0.06 UJ	0.04 U	0.05 UJ	0.2 U	0.05 U	0.04 U		0.0249	0.056 U	0.007	0.00738	0.0031 J	0.00677 UJ	0.008 J 0.008 J	0.006 J 0.007 J			
11	103	Marine Sediment	TIN	7440-02-0	Nickel	mg/kg	3.4 J		4.5 J	9.3	2.5 J	10 U	4.5	10.5	3.67	35.7	6.36	15.5	15.5	#REF!	10.5 J	4.09 4.07	2.52 J 3.43 J	4.69 12.7	3.74 J	2.92

Table C-2-A
Summary of Chemicals for Sediment at Palisades Landfill

							Concentration																			
SWMU	**Location Cross Reference**	**Matrix**	**Method Class**		**Analyte**	**Units**	**5/1996**	**8/1996**	**11/1996**	**2/1997**	**5/1997**	**6/1998**	**9/1999**	**11/2000**	**10/2001**	**10/2002**	**10/2003**		**9/2004**	**9/2005**	**9/2006**	**9/2007**	**9/2008**	**9/2009**	**9/2010**	**8/2011**
11	103	Marine Sediment	TIN	7440-09-7	Potassium	mg/kg	466 U		498 U	493 U	391 U	470	535	611	408	1070	610			#REF!						
11	103	Marine Sediment	TIN	7782-49-2	Selenium	mg/kg	0.16 U		0.16 U	0.08 UJ	0.16 U	1 U	1.3 J	0.72 J	1.2 U	0.454 J	3.03 U	0.5	0.5 U	#REF!	0.13 J	2.2 U 2.2 U	2.3 UJ 2.1 UJ			
11	103	Marine Sediment	TIN	7440-22-4	Silver	mg/kg	0.5 U		0.31 U	0.68 U	0.84 U	2 U	0.03 U	0.06 U	0.12 U	1.38	0.349 J	0.5	0.5 U	#REF!	0.065 J	0.010 J 0.012 J	0.06 UJ 0.07 UJ			
11	103	Marine Sediment	TIN	7440-23-5	Sodium	mg/kg	2780		4090	2240	2400	2600	2870	930		693	2700			#REF!						
11	103	Marine Sediment	TIN	7440-28-0	Thallium	mg/kg	0.2 UJ		0.18 UJ	0.11 U	0.2 UJ	1 U	1 J	2.9 U	0.024 U	0.084 J	0.757 U	0.5	0.5 U	#REF!	0.052 J	0.037 0.037	0.020 0.018 J			
11	103	Marine Sediment	TIN	7440-62-2	Vanadium	mg/kg	39.2		70.1	58.3	46.2	31	81.1	40.1	63.4	38.6	71			#REF!						
11	103	Marine Sediment	TIN	7440-66-6	Zinc	mg/kg	30.2 J		28.6	57	24 J	19	28	307	25.7	583	57.8 J	92.8	92.8	#REF!	74.8 J	24.5 J 25.8 J	15.1 J 15.7 J			

Notes:

Blank cells in the concentration columns indicate that a sample was not collected from that location or the sample was not analyzed for that chemical.
J - estimated value
mg/kg - milligram/kilogram
U - not detected, value shown is the quantitation limit
UJ - Estimated quantitation limit
ug/kg - microgram/kilogram

Table C-2-B
Summary of Chemicals for Surface Water at Palisades Landfill

SMWU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration														
						5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008
11	101	Surface Water	DIN	Aluminum	ug/l	34.5 J	36.6 J	22.4 J	213	174	27 U	43 U	116 J	5.32	17.1	2.79				
11	101	Surface Water	DIN	Antimony	ug/l	0.4 U	0.1 U	0.14 U	1.8 J	0.19 U	0.1 J	0.087 U	1.6 J	0.5 U	0.119	0.274 J	1 UJ	1 UJ 1	0.39 UJ	0.090 U 0.090 U
11	101	Surface Water	DIN	Arsenic	ug/l	0.7 U	0.7 U	0.9 U	1.3 U	1.3 U	0.76 J	0.49 J	2.9 U	2 U	0.378	0.295 J	1 U	1 U 1	0.10 U	0.53 0.61
11	101	Surface Water	DIN	Barium	ug/l	8.1 J	8 J	8.2 J	5.4 J	7.3 J	8.4 J	7.8 J	10.4 J	7.25	7.38	7.87				
11	101	Surface Water	DIN	Beryllium	ug/l	0.2 U	0.2 U	0.3 U	0.34 J	0.2 U	0.33 U	0.28 U	0.6 U	0.5 U	0.15 U	0.15 U	1 U	1 U 1	0.043 U	0.020 U 0.020 U
11	101	Surface Water	DIN	Cadmium	ug/l	0.1 U	0.2 U	0.1 U	0.22 J	0.1 U	0.047 U	0.32 J	0.3 U	2 U	0.2 U	0.2 U	1 U	1 U 0.1	0.094 U	0.023 U 0.020 U
11	101	Surface Water	DIN	Calcium	ug/l	17700	21200	17900	8250	14800	21200	22200	15700	21800	14800	24000				
11	101	Surface Water	DIN	Chromium	ug/l	0.3 U	0.43 J	0.37 U	0.41 U	0.34 J	6.4 U	13.4	0.4 U	2.63	1.91	1.07 J	1 U	1 U 1	0.12 U	0.20 U 0.20 U
11	101	Surface Water	DIN	Cobalt	ug/l	0.1 U	0.1 U	0.37 J	0.1 J	0.15 J	2.9 U	0.12 J	0.5 U	0.4 U	0.5 U	3.32				
11	101	Surface Water	DIN	Copper	ug/l	1 U	6.2 J	3.9 U	5.9 U	5.9 U	3.3 J	2.2 J	1.1 U	3 U	0.772	1.06 J	1.69 J	1.69 J 2	0.67 J	0.40 0.30
11	101	Surface Water	DIN	Iron	ug/l	219	258	135	202	242	136	211	87.6 J	1000 U	59.9	890				
11	101	Surface Water	DIN	Lead	ug/l	0.18 U	0.33 U	0.16 U	2.8	2	0.019 U	0.097 J	1.6 U	0.3 U	0.1 U	0.101 J	1 U	1 U 1	0.075 U	0.030 U 0.030 U
11	101	Surface Water	DIN	Magnesium	ug/l	4650	5410	4810	2950	3990	5240	5680	5680	5330	4950	6200				
11	101	Surface Water	DIN	Manganese	ug/l	15.3	31.8	17.6	12.3	16.4 J	38	46	19.3	57.9	23.5	20.9				
11	101	Surface Water	DIN	Mercury	ug/l	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U 0.2	0.018 UJ	0.20 U 0.20 U
11	101	Surface Water	DIN	Nickel	ug/l	0.45 J	0.53 U	11.5 U	12.5 J	9.3 U	192	11.3 J	0.7 U	1 U	0.841	1.01 J	1 J	1 J 2	50 UJ	0.70 U 0.63 U
11	101	Surface Water	DIN	Potassium	ug/l	772	976	959	1350	1230	1190	1180	1660 J	1120	1890	1200				
11	101	Surface Water	DIN	Selenium	ug/l	0.8 U	0.7 U	0.8 U	0.8 U	0.8 U	1.1 J	2.4 J	1.9 J	2.5 U	1.07	0.517	1.2 J	1.2 J 2	0.41 J	1.2 U 1.2 U
11	101	Surface Water	DIN	Silver	ug/l	2.5 U	3.3 U	1.8 U	4.1 U	4.1 U	3 U	0.5 U	0.7 U	1 U	0.1 U	0.1 UJ	0.06 UJ	0.06 UJ 1	0.085 UJ	0.030 U 0.030 U
11	101	Surface Water	DIN	Sodium	ug/l	17800	16800	17000	15200	16100	17400	18200	20000		11900	18000				
11	101	Surface Water	DIN	Thallium	ug/l	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.008 U	0.012 U	3.5 U	0.5 U	0.175	0.0661	0.06 UJ	0.06 UJ 1	0.044 U	0.020 U 0.020 U
11	101	Surface Water	DIN	Vanadium	ug/l	0.3 U	0.33 J	0.17 J	0.41 J	0.41 J	2 U	0.3 J	0.3 U	10 U	5 U	5 U				
11	101	Surface Water	DIN	Zinc	ug/l	5.7 U	4.9 J	6.7 U	11.4 J	10.6 J	12.4 J	15.2	15 J	10 U	8.78	2.7	4.18 J	4.18 J 3.07	4.0 J	2.07 1.77
11	101	Surface Water	P/A	4,4-DDD	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.02 U	0.02 U	0.03 U						
11	101	Surface Water	P/A	4,4-DDE	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.02 U	0.02 U	0.03 U						
11	101	Surface Water	P/A	4,4-DDT	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.02 U	0.02 U	0.03 U						
11	101	Surface Water	P/A	Aldrin	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01 U	0.0098 U	0.03 U						
11	101	Surface Water	P/A	alpha-BHC	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01 U	0.0098 U	0.03 U						
11	101	Surface Water	P/A	alpha-Chlordane	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01 U	0.0098 U	0.03 U						
11	101	Surface Water	P/A	Aroclor 1016	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.202 U	0.2 U	0.2 U	0.1 U		0.54 UJ	0.5 U			
11	101	Surface Water	P/A	Aroclor 1221	ug/l	0.4 U	2 U	0.4 U	0.4 U	0.2 U	0.404 U	0.4 U	0.39 U	0.1 U		0.54 UJ	1 U			
11	101	Surface Water	P/A	Aroclor 1232	ug/l	0.2 U	1 U	0.2 U	0.2 U	0.1 U	0.202 U	0.2 U	0.2 U	0.1 U		0.54 UJ	0.5 U			
11	101	Surface Water	P/A	Aroclor 1242	ug/l	0.2 U	1 U	0.2 U	0.2 U	0.1 U	0.202 U	0.2 U	0.2 U	0.1 U		0.54 U	0.5 U			
11	101	Surface Water	P/A	Aroclor 1248	ug/l	0.2 U	1 U	0.2 U	0.2 U	0.1 U	0.202 U	0.2 U	0.2 U	0.1 U		0.54 UJ	0.5 U			
11	101	Surface Water	P/A	Aroclor 1254	ug/l	0.2 U	1 U	0.2 U	0.2 U	0.1 U	0.202 U	0.2 U	0.2 U	0.1 U		0.54 UJ	0.5 U			
11	101	Surface Water	P/A	Aroclor 1260	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.202 U	0.2 U	0.2 U	0.1 U		0.54 UJ	0.5 U			
11	101	Surface Water	P/A	beta-BHC	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01 U	0.0098 U	0.03 U						
11	101	Surface Water	P/A	Chlordane (total)	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01								
11	101	Surface Water	P/A	DDT (total)	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.02								
11	101	Surface Water	P/A	delta-BHC	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01 U	0.0098 U	0.03 U						
11	101	Surface Water	P/A	Dieldrin	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.02 U	0.02 U	0.03 U						

Table C-2-B
Summary of Chemicals for Surface Water at Palisades Landfill

SMWU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration														
						5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008
11	101	Surface Water	P/A	Endosulfan (total)	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.01								
11	101	Surface Water	P/A	Endosulfan I	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01 U	0.0098 U	0.03 U						
11	101	Surface Water	P/A	Endosulfan II	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.02 U	0.02 U	0.03 U						
11	101	Surface Water	P/A	Endosulfan sulfate	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.02 U	0.02 U	0.03 U						
11	101	Surface Water	P/A	Endrin	ug/l	0.02 UJ	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.02 U	0.02 U	0.03 U						
11	101	Surface Water	P/A	Endrin Aldehyde	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.02 U	0.02 U	0.03 U						
11	101	Surface Water	P/A	Endrin ketone	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.0202 U	0.02 U	0.02 U	0.03 U						
11	101	Surface Water	P/A	gamma-Chlordane	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01 U	0.0098 U	0.03 U						
11	101	Surface Water	P/A	Heptachlor	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01 U	0.0098 U	0.03 U						
11	101	Surface Water	P/A	Heptachlor epoxide	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01 U	0.0098 U	0.03 U						
11	101	Surface Water	P/A	Lindane	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.0101 U	0.01 U	0.0098 U	0.03 U						
11	101	Surface Water	P/A	Methoxychlor	ug/l	0.1 U	0.5 U	0.02 U	0.02 U	0.01 U	0.101 U	0.1 U	0.098 U	0.03 U						
11	101	Surface Water	P/A	PCB (Sum Detect + .5 NonDetect)	ug/l	0.4 U	2 U	0.4 U	0.4 U	0.2 U	0.404 U	0.2								
11	101	Surface Water	P/A	Technical Chlordane	ug/l					0.2 U										
11	101	Surface Water	P/A	Toxaphene	ug/l	1 U	5 U	1 U	1 U	0.5 U	1.01 U	1 U	0.98 U	2.5 U						
11	101	Surface Water	SVOA	1,2,4-Trichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5 U			5 U	25 U						
11	101	Surface Water	SVOA	1,2-Dichlorobenzene	ug/l								5 U	20 U						
11	101	Surface Water	SVOA	1,3-Dichlorobenzene	ug/l								5 U	20 U						
11	101	Surface Water	SVOA	1,4-Dichlorobenzene	ug/l								5 U	20 U						
11	101	Surface Water	SVOA	2,2-oxybis(1-Chloropropane)	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	2,4,5-Trichlorophenol	ug/l	19 UJ	20 U	20 U	20 U	20 U	20 U	20 U	5 U	20 U						
11	101	Surface Water	SVOA	2,4,6-Trichlorophenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	2,4-Dichlorophenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	2,4-Dimethylphenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	2,4-Dinitrophenol	ug/l	19 UJ	20 U	20 U	20 U	20 U	20 U	20 U	10 U	180 U						
11	101	Surface Water	SVOA	2,4-Dinitrotoluene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	2,6-Dinitrotoluene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	2-Chloronaphthalene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U						
11	101	Surface Water	SVOA	2-Chlorophenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	2-Methylnaphthalene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	0.052 U					
11	101	Surface Water	SVOA	2-Methylphenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	2-Nitroaniline	ug/l	19 UJ	20 U	20 U	20 U	20 U	20 U	20 U	5 U	20 U						
11	101	Surface Water	SVOA	2-Nitrophenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	3,3-Dichlorobenzidine	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	3-Nitroaniline	ug/l	19 UJ	20 U	20 U	20 U	20 U	20 U	20 U	5 U	20 U						
11	101	Surface Water	SVOA	4,6-Dinitro-2-methylphenol	ug/l	19 UJ	20 U	20 U	20 U	20 U	20 U	20 U	5 U	180 U						
11	101	Surface Water	SVOA	4-Bromophenyl-phenylether	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	4-Chloro-3-methylphenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	4-Chloroaniline	ug/l	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	4-Chlorophenyl-phenylether	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	4-Methylphenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U							
11	101	Surface Water	SVOA	4-Nitroaniline	ug/l	19 UJ	20 U	20 U	20 U	20 U	20 U	20 U	5 U	20 U						
11	101	Surface Water	SVOA	4-Nitrophenol	ug/l	19 UJ	20 U	20 U	20 U	20 U	20 U	20 U	5 U	140 U						
11	101	Surface Water	SVOA	Acenaphthene	ug/l	0.0016 U	0.0067 U	0.0067 U	0.0067 UJ	0.0067 U	0.98 U	1 U	0.97 U	25 U	0.052 U					
11	101	Surface Water	SVOA	Acenaphthylene	ug/l	5 U	5 U	5 U	5 U	5 U	0.98 U	2 U	1.9 U	20 U	0.052 U					
11	101	Surface Water	SVOA	Aniline	ug/l									20 U						
11	101	Surface Water	SVOA	Anthracene	ug/l	0.0016 U	0.002 U	0.002 U	0.004 UJ	0.004 U	0.098 U	0.1 U	0.097 U	20 U	0.31 U					
11	101	Surface Water	SVOA	Azobenzene	ug/l									200 U						
11	101	Surface Water	SVOA	Benzo(a)anthracene	ug/l	0.0032 U	0.0067 U	0.0067 U	0.013 UJ	0.013 U	0.098 U	0.1 U	0.097 U	20 U	0.052 U					
11	101	Surface Water	SVOA	Benzo(a)pyrene	ug/l	0.0003 U	0.0005 U	0.0005 U	0.001 UJ	0.001 U	0.098 U	0.1 U	0.097 U	20 U	0.066 U					
11	101	Surface Water	SVOA	Benzo(b)fluoranthene	ug/l	0.0008 U	0.001 U	0.0008 U	0.006 J	0.002 U	0.098 U	0.2 U	0.19 U	20 U	0.052 U					
11	101	Surface Water	SVOA	Benzo(g,h,i)perylene	ug/l	0.0008 U	0.001 UJ	0.0001 U	0.0027 J	0.002 U	0.098 U	0.2 U	0.19 U	25 U	0.094 U					
11	101	Surface Water	SVOA	Benzo(k)fluoranthene	ug/l	0.0002 U	0.0004	0.0003 U	0.0004 UJ	0.0004 U	0.098 U	0.1 U	0.097 U	25 U	0.1 U					
11	101	Surface Water	SVOA	Benzoic acid	ug/l									50 U						

Table C-2-B
Summary of Chemicals for Surface Water at Palisades Landfill

SMWU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration														
						5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008
11	101	Surface Water	SVOA	Benzofluoranthenes (total)	ug/l	0.0008 U	0.0004	0.0008 U	0.006	0.002 U	0.098 U	0.1								
11	101	Surface Water	SVOA	Benzyl alcohol	ug/l									20 U						
11	101	Surface Water	SVOA	bis(2-Chloroethoxy)methane	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U						
11	101	Surface Water	SVOA	bis(2-Chloroethyl)ether	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	bis(2-Ethylhexyl)phthalate	ug/l	5 U	5 U	5 U	54 J	1 J	5 U	0.33 J	5 U	20 U						
11	101	Surface Water	SVOA	Butylbenzylphthalate	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	Carbazole	ug/l								5 U							
11	101	Surface Water	SVOA	Chrysene	ug/l	0.0032 U	0.0067 U	0.0067 U	0.013 UJ	0.013 U	0.049 U	0.1 U	0.097 U	20 U	0.052 U					
11	101	Surface Water	SVOA	CPAH (total)	ug/l	0.0032 U	0.0004	0.0067 U	0.006	0.013 U	0.49 U	0.1								
11	101	Surface Water	SVOA	Dibenz(a,h)anthracene	ug/l	0.0016 U	0.0067 UJ	0.0067 U	0.013 UJ	0.013 U	0.49 U	0.2 U	0.19 U	25 U	0.16 U					
11	101	Surface Water	SVOA	Dibenzofuran	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	Diethylphthalate	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	Dimethylphthalate	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	Di-n-butylphthalate	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	Di-n-octylphthalate	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	Fluoranthene	ug/l	0.0032 U	0.0068	0.0067 U	0.0812 J	0.013 U	0.49 U	0.2 U	0.19 U	20 U	0.052 U					
11	101	Surface Water	SVOA	Fluorene	ug/l	0.0032 U	0.0067 U	0.0067 U	0.013 UJ	0.013 U	0.098 U	0.1 U	0.097 U	20 U	0.13 U					
11	101	Surface Water	SVOA	Hexachlorobenzene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	Hexachlorobutadiene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	30 U						
11	101	Surface Water	SVOA	Hexachlorocyclopentadiene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	30 U						
11	101	Surface Water	SVOA	Hexachloroethane	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	HPAH (total)	ug/l	0.0032 U	0.0072	0.0067 U	0.1579	0.013 U	0.49 U	0.1								
11	101	Surface Water	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.0032 U	0.0067 U	0.0067 U	0.013 UJ	0.013 U	0.098 U	0.1 U	0.097 U	20 U	0.21 U					
11	101	Surface Water	SVOA	Isophorone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U						
11	101	Surface Water	SVOA	m,p-Cresols	ug/l									20 U						
11	101	Surface Water	SVOA	LPAH (total)	ug/l	5 U	0.014	5 U	0.325	5 U	2 U	0.1								
11	101	Surface Water	SVOA	Naphthalene	ug/l	0.0097 U	0.014	0.012 U	0.105 J	0.04 U	2 U	1 U	3.1 J	20 U	0.25 U					
11	101	Surface Water	SVOA	NCPAH (total)	ug/l	5 U	0.0208	5 U	0.4769	5 U	5 U	0.1								
11	101	Surface Water	SVOA	Nitrobenzene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	N-Nitrosodimethylamine	ug/l									20 U						
11	101	Surface Water	SVOA	N-Nitrosodinpropylamine	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	N-Nitrosodiphenylamine	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	101	Surface Water	SVOA	Pentachlorophenol	ug/l	19 UJ	20 U	20 U	20 U	20 U	20 U	20 U	5 U	140 U						
11	101	Surface Water	SVOA	Phenanthrene	ug/l	0.0032 U	0.013 U	0.013 U	0.22 J	0.027 U	0.098 U	0.1 U	0.097 U	20 U	0.052 U					
11	101	Surface Water	SVOA	Phenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U						
11	101	Surface Water	SVOA	Pyrene	ug/l	0.0032 U	0.0067 U	0.0067 U	0.068 J	0.013 U	0.098 U	0.1 U	0.097 U	20 U	0.052 U					
11	101	Surface Water	TIN	Aluminum	ug/l	99.1 J	46.4 J	54.3 J	331	252	116	66.4 J	192 J	20 U	316	134				
11	101	Surface Water	TIN	Antimony	ug/l	0.4 U	0.1 U	0.1 U	0.18 U	0.18 U	0.69 J	0.087 U	1.9 J	1 U	0.5 U	0.5 U	1 U	1 U 1	0.31 UJ	0.090 U 0.090 U
11	101	Surface Water	TIN	Arsenic	ug/l	0.7 U	0.7 U	0.9 U	1.3 U	1.3 U	0.88 J	0.6 J	2.9 U	5 U	1 U	1 U	1 U	1 U 1	0.19 UJ	0.57 0.60
11	101	Surface Water	TIN	Barium	ug/l	8.2 J	7.9 J	8.3 J	6 J	7.4 J	8.3 J	9.1 J	10.2 J	7.22	9.35	8.36				
11	101	Surface Water	TIN	Beryllium	ug/l	0.26 U	0.2 U	0.3 U	0.2 U	0.22 U	0.3 J	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U 1	0.043 U	0.020 U 0.020 U
11	101	Surface Water	TIN	Cadmium	ug/l	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.047 U	0.053 U	0.3 U	2 U	0.2 U	0.2 U	1 U	1 U 1	0.094 UJ	0.020 U 0.020 U
11	101	Surface Water	TIN	Calcium	ug/l	17600	20800	18300	8330	14900	21100	22900	15300	21900	18400					
11	101	Surface Water	TIN	Chromium	ug/l	0.3 U	0.36 J	0.35 U	0.44 U	0.26 J	6.4 U	56.4	0.4 U	6 U	0.352	0.252 J	0.73 J	0.73 J 1	0.12 J	0.35 U 0.20 U
11	101	Surface Water	TIN	Cobalt	ug/l	0.1 U	0.1 U	0.1 U	0.15 J	0.13 J	2.9 U	0.65 J	0.5 U	0.8 U	0.1 U	0.123				
11	101	Surface Water	TIN	Copper	ug/l	1.1 U	3.8 J	4.2 U	8.4 J	5.9 U	2.7 J	10.2	1.4 J	6 U	1.69	0.5 U	5.3	5.3 2	0.58 J	0.27 0.25 U
11	101	Surface Water	TIN	Iron	ug/l	357	330	273	425	399	326	623	306	1000 U	1070					

Table C-2-B
Summary of Chemicals for Surface Water at Palisades Landfill

SMWU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration														
						5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008
11	101	Surface Water	TIN	Lead	ug/l	0.45 U	0.41 U	0.25 U	1.3 J	1.7 J	0.019 U	0.32 J	1.6 U	2 U	0.431	0.15 U	0.67 J	0.67 J 1	0.075 UJ	0.030 U 0.030 U
11	101	Surface Water	TIN	Magnesium	ug/l	4690	5350	4870	2940	4010	5200	5690	5470	5290	4570					
11	101	Surface Water	TIN	Manganese	ug/l	17.7	33.9	20.1	17.8	19.8 J	49	49.9	22.3	57.3	52.9	28.6				
11	101	Surface Water	TIN	Mercury	ug/l	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U 0.2	0.018 UJ	0.20 U 0.20 U
11	101	Surface Water	TIN	Nickel	ug/l	0.31 J	0.53 U	11.5 U	9.3 U	9.3 U	3.6 U	38.4	0.7 U	2 U	1.33	0.803	3.67	3.67 2	50 UJ	0.71U 0.58 U
11	101	Surface Water	TIN	Potassium	ug/l	780	976	944	1360	1190	1060	1140	1590 J	1140	1760					
11	101	Surface Water	TIN	Selenium	ug/l	0.8 U	0.7 U	0.8 U	0.8 U	0.8 U	0.97 J	2.4 J	1.1 U	5 U	0.652	0.5 U	1 U	1 U 2	0.29 J	1.2 U 1.2 U
11	101	Surface Water	TIN	Silver	ug/l	2.5 U	3.3 U	1.8 U	4.1 U	4.1 U	3 U	0.5 U	0.7 U	2 U	0.35 U	0.368 J	1 U	1 U 1	0.085 U	0.030 U 0.030 U
11	101	Surface Water	TIN	Sodium	ug/l	17700	16600	17100	14800	16000	17200	17900	19100		18100					
11	101	Surface Water	TIN	Thallium	ug/l	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.008 U	0.012 U	3.5 U	1 U	0.25 U	0.25 U	1 U	1 U 1	0.044 U	0.020 U 0.020 U
11	101	Surface Water	TIN	Vanadium	ug/l	0.66 U	0.4 J	0.33 J	0.74 J	0.62 J	2 U	0.8 J	0.8 J	20 U	1.62	2.12				
11	101	Surface Water	TIN	Zinc	ug/l	6.6 U	4.8 J	4.9 U	15.6 J	11.2 J	9.1 J	22.8	16.1 J	25 U	7.66	5.4 J	17.5	17.5 13	3.4 J	1.83 2.35
11	101	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l									1 U	2 U					
11	101	Surface Water	VOA	1,1,1-Trichloroethane	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l						1 U		1 U	2 U	2 U					
11	101	Surface Water	VOA	1,1,2-Trichloroethane	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U					
11	101	Surface Water	VOA	1,1-Dichloroethane	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	1,1-Dichloroethene	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	1,1-Dichloropropene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	1,2,3-Trichloropropane	ug/l									2 U	2 U					
11	101	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l						1 U			2 U	2 U					
11	101	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l						1 U			2.5 U	10 U					
11	101	Surface Water	VOA	1,2-Dibromoethane	ug/l						1 U			1 U	2 U					
11	101	Surface Water	VOA	1,2-Dichlorobenzene	ug/l						1 U			1 U	2 U					
11	101	Surface Water	VOA	1,2-Dichloroethane	ug/l						1 U		1 U	2 U	2 U					
11	101	Surface Water	VOA	1,2-Dichloropropane	ug/l						1 U		1 U	2 U	2 U					
11	101	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	1,3-Dichlorobenzene	ug/l						1 U			1 U	2 U					
11	101	Surface Water	VOA	1,3-Dichloropropane	ug/l									1 U	2 U					
11	101	Surface Water	VOA	1,3-Dichloropropene	ug/l						1 U									
11	101	Surface Water	VOA	1,4-Dichlorobenzene	ug/l						1 U			1 U	2 U					
11	101	Surface Water	VOA	2,2-Dichloropropane	ug/l									1 U	2 U					
11	101	Surface Water	VOA	2-Butanone	ug/l						5 U		5 U	50 U	50 U					
11	101	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l									10 U	10 U					
11	101	Surface Water	VOA	2-Chlorotoluene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	2-Hexanone	ug/l						5 U		5 U	10 U	20 U					
11	101	Surface Water	VOA	4-Chlorotoluene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	4-Isopropyltoluene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	4-Methyl-2-pentanone	ug/l						5 U		5 U	10 U	20 U					
11	101	Surface Water	VOA	Acetone	ug/l						5 U		5 U		50 U					
11	101	Surface Water	VOA	Acrylonitrile	ug/l										10 U					
11	101	Surface Water	VOA	Benzene	ug/l	0.3 U	0.2 U	0.1 U	0.1 U	1 U	1 U	0.2 U	1 U	0.5 U	2 U					
11	101	Surface Water	VOA	Bromobenzene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	Bromochloromethane	ug/l						1 U			1 U	2 U					

Table C-2-B
Summary of Chemicals for Surface Water at Palisades Landfill

SMWU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration														
						5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008
11	101	Surface Water	VOA	Bromodichloromethane	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	Bromoform	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	Bromomethane	ug/l						1 U		1 U	2 U	5 U					
11	101	Surface Water	VOA	BTEX (total)	ug/l	1 U	0.9 U	0.2 U	0.2 U	2 U	2 U	0.2								
11	101	Surface Water	VOA	Carbon disulfide	ug/l						1 U		1 U	10 U	2 U					
11	101	Surface Water	VOA	Carbon tetrachloride	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	Chlorobenzene	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	Chloroethane	ug/l						1 U		1 U	1 U	5 U					
11	101	Surface Water	VOA	Chloroform	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	Chloromethane	ug/l						1 U		1 U	1 U	5 U					
11	101	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	Dibromochloromethane	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	Dibromomethane	ug/l									2 U	2 U					
11	101	Surface Water	VOA	Dichlorodifluoromethane	ug/l								1 U	1 U	5 U					
11	101	Surface Water	VOA	Ethylbenzene	ug/l	0.4 U	0.2 U	0.1 U	0.1 U	1 U	1 U	0.2 U	1 U	1 U	2 U					
11	101	Surface Water	VOA	Hexachlorobutadiene	ug/l									2 U	2 U					
11	101	Surface Water	VOA	Iodomethane	ug/l										5 U					
11	101	Surface Water	VOA	Isopropylbenzene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	m,p-Xylene	ug/l								1 U		2 U					
11	101	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l										2 U					
11	101	Surface Water	VOA	Methylene chloride	ug/l						2 U		1 U	5 U	5 U					
11	101	Surface Water	VOA	m-Xylene	ug/l						2 U	0.54								
11	101	Surface Water	VOA	Naphthalene	ug/l									2 U	2 U					
11	101	Surface Water	VOA	n-Butylbenzene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	n-Propylbenzene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	o-Xylene	ug/l						1 U	0.22	1 U		2 U					
11	101	Surface Water	VOA	sec-Butylbenzene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	Styrene	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	tert-Butylbenzene	ug/l									1 U	2 U					
11	101	Surface Water	VOA	Tetrachloroethene	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	Toluene	ug/l	0.5 U	0.9 U	0.2 U	0.2 U	1 U	1 U	0.3 U	1 U	1 U	2 U					
11	101	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l										10 U					
11	101	Surface Water	VOA	Trichloroethene	ug/l						1 U		1 U	1 U	2 U					
11	101	Surface Water	VOA	Trichlorofluoromethane	ug/l								1 U	1 U	2 U					
11	101	Surface Water	VOA	Vinyl acetate	ug/l										5 U					
11	101	Surface Water	VOA	Vinyl chloride	ug/l						1 U		1 U	2 U	2 U					
11	101	Surface Water	VOA	Xylenes	ug/l	1 U	0.5 U	0.2 U	0.2 U	2 U	1 U			2 U						
11	101	Surface Water	VOA	Xylenes (total)	ug/l	1 U	0.5 U	0.2 U	0.2 U	2 U	2 U	0.54								
11	102	Surface Water	DIN	Aluminum	ug/l	40.2 J	19.7 U	18.9 U	214	176	27 U	43 U	108 J	3.22	3.71	2.84				
11	102	Surface Water	DIN	Antimony	ug/l	0.4 U	0.14 U	0.12 U	2.3 J	0.39 J	0.046 U	0.087 U	1.6 U	0.5 U	0.165	0.293	0.25 J	0.25 J 1	0.11 UJ	0.090 U
11	102	Surface Water	DIN	Arsenic	ug/l	0.7 U	0.7 U	0.9 U	1.3 U	1.3 U	0.67 J	0.37 J	2.9 U	2 U	0.199	0.259	1 U	1 U 1	0.10 UJ	0.45 J
11	102	Surface Water	DIN	Barium	ug/l	8.9 J	9.3 J	9.1 J	7 J	8.6 J	8.9 J	8.5 J	11.4 J	7.74	7.58	7.85				
11	102	Surface Water	DIN	Beryllium	ug/l	0.26 U	0.2 U	0.3 U	0.2 U	0.2 U	0.33 U	0.28 U	0.6 U	0.5 U	0.15 U	0.15 U	1 U	1 U 1	0.043 U	0.020 U
11	102	Surface Water	DIN	Cadmium	ug/l	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.047 U	0.64 J	0.3 U	2 U	0.2 U	0.2 U	1 U	1 U 0.1	0.094 U	0.020 U
11	102	Surface Water	DIN	Calcium	ug/l	20900	22400	21500	9300	16500	22100	22200	14900	22100	19400	25000				
11	102	Surface Water	DIN	Chromium	ug/l	0.7 U	0.43 J	0.27 U	0.58 U	0.38 J	6.4 U	2.3 J	0.4 U	2.4	1.25	0.61	1 U	1 U 1	0.12 U	0.20 U
11	102	Surface Water	DIN	Cobalt	ug/l	0.1 U	0.1 U	0.1 U	0.12 J	0.11 J	2.9 U	0.043 U	0.5 U	0.4 U	0.5 U	4.99				
11	102	Surface Water	DIN	Copper	ug/l	1.6 U	1.2 U	3.9 U	15.9	5.9 U	2.1 U	0.7 U	1.4 J	3 U	0.495	1.49 J	3.11	3.11 2	0.84 J	0.48
11	102	Surface Water	DIN	Iron	ug/l	208	216	156	316	369	62.6 J	134	63.3 J	1000 U	50 U	150				
11	102	Surface Water	DIN	Lead	ug/l	0.54 U	1 U	0.29 U	1.5 J	1.9 J	0.019 U	0.26 J	1.8 J	0.3 U	0.1 U	0.131	1 UJ	1 UJ 1	0.075 U	0.042 U
11	102	Surface Water	DIN	Magnesium	ug/l	5480	5650	5750	3090	4450	5400	5670	5850	5570	5770	6300				

Table C-2-B
Summary of Chemicals for Surface Water at Palisades Landfill

SMWU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration														
						5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008
11	102	Surface Water	DIN	Manganese	ug/l	11.8	12.1	17	17.2	15 J	12.9	11.5	15.4	10.3	11.8	15.6				
11	102	Surface Water	DIN	Mercury	ug/l	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U 0.2	0.018 UJ	0.20 U
11	102	Surface Water	DIN	Nickel	ug/l	0.43 J	0.61 U	11.5 U	9.3 U	9.3 U	3.7 J	2.2 J	0.7 U	1 U	0.986	1.16	0.78 J	0.78 J 2	50 UJ	0.92
11	102	Surface Water	DIN	Potassium	ug/l	1090	1040	1320	1410	1530	1000	1210	1990 J	1110	1150	1100				
11	102	Surface Water	DIN	Selenium	ug/l	0.8 U	0.7 U	0.8 U	0.8 U	0.8 U	1.2 J	2.4 J	1.1 U	2.5 U	0.5 U	0.761	1 U	1 U 2	0.27 J	1.2 U
11	102	Surface Water	DIN	Silver	ug/l	2.5 U	3.3 U	1.8 U	4.1 U	4.1 U	3 U	0.5 U	0.7 U	1 U	0.1 U	0.1 U	1 U	1 U 1	0.085 UJ	0.030 U
11	102	Surface Water	DIN	Sodium	ug/l	18600	17400	18000	15000	16500	17200	17900	22900		16700	19000				
11	102	Surface Water	DIN	Thallium	ug/l	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.008 U	0.012 U	3.5 U	0.5 U	0.05 U	0.05 U	0.04 UJ	0.04 UJ 1	0.044 U	0.020 U
11	102	Surface Water	DIN	Vanadium	ug/l	0.48 U	0.12 J	0.11 J	0.45 J	0.4 J	2 U	0.3 U	0.3 U	10 U	5 U	5 U				
11	102	Surface Water	DIN	Zinc	ug/l	6 U	7.5 J	8.1 U	26.2	21.6	12.1 J	12.1	48.2	10 U	17	5.95	12.6	12.6 6.98	4.6 J	5.05
11	102	Surface Water	P/A	4,4-DDD	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U	0.02 U	0.02 U	0.031 U						
11	102	Surface Water	P/A	4,4-DDE	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U	0.02 U	0.02 U	0.031 U						
11	102	Surface Water	P/A	4,4-DDT	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U	0.02 U	0.02 U	0.031 U						
11	102	Surface Water	P/A	Aldrin	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.031 U						
11	102	Surface Water	P/A	alpha-BHC	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.031 U						
11	102	Surface Water	P/A	alpha-Chlordane	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.031 U						
11	102	Surface Water	P/A	Aroclor 1016	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U	0.102 U		0.53 UJ	0.5 U			
11	102	Surface Water	P/A	Aroclor 1221	ug/l	0.4 U	2 U	0.4 U	0.4 U	0.2 U	0.4 U	0.4 U	0.4 U	0.102 U		0.53 UJ	1 U			
11	102	Surface Water	P/A	Aroclor 1232	ug/l	0.2 U	1 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U	0.102 U		0.53 UJ	0.5 U			
11	102	Surface Water	P/A	Aroclor 1242	ug/l	0.2 U	1 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U	0.102 U		0.53 U	0.5 U			
11	102	Surface Water	P/A	Aroclor 1248	ug/l	0.2 U	1 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U	0.102 U		0.53 UJ	0.5 U			
11	102	Surface Water	P/A	Aroclor 1254	ug/l	0.2 U	1 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U	0.102 U		0.53 UJ	0.5 U			
11	102	Surface Water	P/A	Aroclor 1260	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U	0.102 U		0.53 UJ	0.5 U			
11	102	Surface Water	P/A	beta-BHC	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.031 U						
11	102	Surface Water	P/A	Chlordane (total)	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U									
11	102	Surface Water	P/A	DDT (total)	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U									
11	102	Surface Water	P/A	delta-BHC	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.031 U						
11	102	Surface Water	P/A	Dieldrin	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U	0.02 U	0.02 U	0.031 U						
11	102	Surface Water	P/A	Endosulfan (total)	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U									
11	102	Surface Water	P/A	Endosulfan I	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.031 U						
11	102	Surface Water	P/A	Endosulfan II	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U	0.02 U	0.02 U	0.031 U						
11	102	Surface Water	P/A	Endosulfan sulfate	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U	0.02 U	0.02 U	0.031 U						
11	102	Surface Water	P/A	Endrin	ug/l	0.02 UJ	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U	0.02 U	0.02 U	0.031 U						
11	102	Surface Water	P/A	Endrin Aldehyde	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U	0.02 U	0.02 U	0.031 U						
11	102	Surface Water	P/A	Endrin ketone	ug/l	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.02 U	0.02 U	0.02 U	0.031 U						
11	102	Surface Water	P/A	gamma-Chlordane	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.031 U						
11	102	Surface Water	P/A	Heptachlor	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.031 U						
11	102	Surface Water	P/A	Heptachlor epoxide	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.031 U						
11	102	Surface Water	P/A	Lindane	ug/l	0.01 U	0.05 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U	0.01 U	0.031 U						
11	102	Surface Water	P/A	Methoxychlor	ug/l	0.1 U	0.5 U	0.02 U	0.02 U	0.01 U	0.1 U	0.1 U	0.1 U	0.031 U						
11	102	Surface Water	P/A	PCB (Sum Detect + .5 NonDetect)	ug/l	0.4 U	2 U	0.4 U	0.4 U	0.2 U	0.4 U									
11	102	Surface Water	P/A	Technical Chlordane	ug/l					0.2 U										
11	102	Surface Water	P/A	Toxaphene	ug/l	1 U	5 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2.6 U						
11	102	Surface Water	SVOA	1,2,4-Trichlorobenzene	ug/l	5 U	5 U	5 U	5 U	5 U			5 U	25 U						
11	102	Surface Water	SVOA	1,2-Dichlorobenzene	ug/l								5 U	20 U						
11	102	Surface Water	SVOA	1,3-Dichlorobenzene	ug/l								5 U	20 U						
11	102	Surface Water	SVOA	1,4-Dichlorobenzene	ug/l								5 U	20 U						
11	102	Surface Water	SVOA	2,2-oxybis(1-Chloropropane)	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	2,4,5-Trichlorophenol	ug/l	20 U	20 U	20 U	20 U	20 U	20 U	20 U	5 U	20 U						
11	102	Surface Water	SVOA	2,4,6-Trichlorophenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	2,4-Dichlorophenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	2,4-Dimethylphenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	2,4-Dinitrophenol	ug/l	20 U	20 U	20 U	20 U	20 U	20 U	20 U	10 U	180 U						
11	102	Surface Water	SVOA	2,4-Dinitrotoluene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						

Table C-2-B
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SMWU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration														
						5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008
11	102	Surface Water	SVOA	2,6-Dinitrotoluene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	2-Chloronaphthalene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U						
11	102	Surface Water	SVOA	2-Chlorophenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	2-Methylnaphthalene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	0.052 U					
11	102	Surface Water	SVOA	2-Methylphenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	2-Nitroaniline	ug/l	20 U	20 U	20 U	20 U	20 U	20 U	20 U	5 U	20 U						
11	102	Surface Water	SVOA	2-Nitrophenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	3,3-Dichlorobenzidine	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	3-Nitroaniline	ug/l	20 U	20 U	20 U	20 U	20 U	20 U	20 U	5 U	20 U						
11	102	Surface Water	SVOA	4,6-Dinitro-2-methylphenol	ug/l	20 U	20 U	20 U	20 U	20 U	20 U	20 U	5 U	180 U						
11	102	Surface Water	SVOA	4-Bromophenyl-phenylether	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	4-Chloro-3-methylphenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	4-Chloroaniline	ug/l	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	4-Chlorophenyl-phenylether	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	4-Methylphenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U							
11	102	Surface Water	SVOA	4-Nitroaniline	ug/l	20 U	20 U	20 U	20 U	20 U	20 U	20 U	5 U	20 U						
11	102	Surface Water	SVOA	4-Nitrophenol	ug/l	20 U	20 U	20 U	20 U	20 U	20 U	20 U	5 U	140 U						
11	102	Surface Water	SVOA	Acenaphthene	ug/l	0.0016 U	0.0067 U	0.0002 J	0.0067 U	0.0067 U	0.99 U	1 U	0.97 U	25 U	0.052 U					
11	102	Surface Water	SVOA	Acenaphthylene	ug/l	5 U	5 U	5 U	5 U	5 U	0.99 U	2 U	1.9 U	20 U	0.052 U					
11	102	Surface Water	SVOA	Aniline	ug/l									20 U						
11	102	Surface Water	SVOA	Anthracene	ug/l	0.0016 U	0.002 U	0.0011 J	0.004 U	0.004 U	0.099 U	0.1 U	0.097 U	20 U	0.31 U					
11	102	Surface Water	SVOA	Azobenzene	ug/l									200 U						
11	102	Surface Water	SVOA	Benzo(a)anthracene	ug/l	0.0032 U	0.0067 U	0.0067 U	0.013 U	0.013 U	0.099 U	0.1 U	0.097 U	20 U	0.052 U					
11	102	Surface Water	SVOA	Benzo(a)pyrene	ug/l	0.0003	0.0005 U	0.0004 J	0.0012 J	0.0013	0.099 U	0.1 U	0.097 U	20 U	0.065 U					
11	102	Surface Water	SVOA	Benzo(b)fluoranthene	ug/l	0.0008 U	0.001 U	0.0011 U	0.0025 J	0.002 U	0.099 U	0.2 U	0.19 U	20 U	0.052 U					
11	102	Surface Water	SVOA	Benzo(g,h,i)perylene	ug/l	0.0008 U	0.001 UJ	0.0009	0.002	0.002 U	0.099 U	0.2 U	0.19 U	25 U	0.093 U					
11	102	Surface Water	SVOA	Benzo(k)fluoranthene	ug/l	0.0002	0.0002 U	0.0004 U	0.0008	0.0009	0.099 U	0.1 U	0.097 U	25 U	0.1 U					
11	102	Surface Water	SVOA	Benzoic acid	ug/l									50 U						
11	102	Surface Water	SVOA	Benzofluoranthenes (total)	ug/l	0.0002	0.001 U	0.0011 U	0.0033	0.0009	0.099 U									
11	102	Surface Water	SVOA	Benzyl alcohol	ug/l									20 U						
11	102	Surface Water	SVOA	bis(2-Chloroethoxy)methane	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U						
11	102	Surface Water	SVOA	bis(2-Chloroethyl)ether	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	bis(2-Ethylhexyl)phthalate	ug/l	5 U	5 U	5 U	6 J	2 J	5 U	0.5 J	5 U	20 U						
11	102	Surface Water	SVOA	Butylbenzylphthalate	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	Carbazole	ug/l								5 U							
11	102	Surface Water	SVOA	Chrysene	ug/l	0.0032 U	0.0067 U	0.0067 U	0.013 U	0.013 U	0.049 U	0.1 U	0.097 U	20 U	0.052 U					
11	102	Surface Water	SVOA	CPAH (total)	ug/l	0.0005	0.0067 U	0.0004	0.0045	0.0022	0.49 U									
11	102	Surface Water	SVOA	Dibenz(a,h)anthracene	ug/l	0.0016 U	0.0067 UJ	0.0067 U	0.013 U	0.013 U	0.49 U	0.2 U	0.19 U	25 U	0.15 U					
11	102	Surface Water	SVOA	Dibenzofuran	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	Diethylphthalate	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	Dimethylphthalate	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	Di-n-butylphthalate	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	Di-n-octylphthalate	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	Fluoranthene	ug/l	0.004	0.0067 U	0.0092	0.031 J	0.015	0.49 U	0.2 U	0.19 U	20 U	0.052 U					
11	102	Surface Water	SVOA	Fluorene	ug/l	0.0032 U	0.0067 U	0.0044 J	0.013 U	0.013 U	0.099 U	0.1 U	0.097 U	20 U	0.12 U					
11	102	Surface Water	SVOA	Hexachlorobenzene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	Hexachlorobutadiene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	30 U						
11	102	Surface Water	SVOA	Hexachlorocyclopentadiene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	30 U						
11	102	Surface Water	SVOA	Hexachloroethane	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	HPAH (total)	ug/l	0.0079	0.017	0.0226	0.0695	0.0322	0.49 U									
11	102	Surface Water	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.0032 U	0.0067 U	0.0067 U	0.013 U	0.013 U	0.099 U	0.1 U	0.097 U	20 U	0.21 U					
11	102	Surface Water	SVOA	Isophorone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U						
11	102	Surface Water	SVOA	m,p-Cresols	ug/l									20 U						
11	102	Surface Water	SVOA	LPAH (total)	ug/l	5 U	5 U	0.0201	0.056	5 U	2 U									

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SMWU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration														
						5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008
11	102	Surface Water	SVOA	Naphthalene	ug/l	0.0096 U	0.012 U	0.0138	0.056 J	0.04 U	2 U	1 U	0.97 U	20 U	0.25 U					
11	102	Surface Water	SVOA	NCPAH (total)	ug/l	0.0074	0.017	0.0423	0.121	0.03	5 U									
11	102	Surface Water	SVOA	Nitrobenzene	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	N-Nitrosodimethylamine	ug/l									20 U						
11	102	Surface Water	SVOA	N-Nitrosodinpropylamine	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	N-Nitrosodiphenylamine	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	20 U						
11	102	Surface Water	SVOA	Pentachlorophenol	ug/l	20 U	20 U	20 U	20 U	20 U	20 U	20 U	5 U	140 U						
11	102	Surface Water	SVOA	Phenanthrene	ug/l	0.0032 U	0.013 U	0.0006 J	0.027 UJ	0.0267 U	0.099 U	0.1 U	0.097 U	20 U	0.052 U					
11	102	Surface Water	SVOA	Phenol	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U						
11	102	Surface Water	SVOA	Pyrene	ug/l	0.0034	0.017	0.0121	0.032 J	0.015	0.099 U	0.1 U	0.097 U	20 U	0.052 U					
11	102	Surface Water	TIN	Aluminum	ug/l	65.3 J	27.9 J	34.3 J	335	258	27 U	55.1 J	347	20 U	16	25.3				
11	102	Surface Water	TIN	Antimony	ug/l	0.4 U	0.13 U	0.16 U	0.25 U	0.24 U	0.31 J	0.56 J	1.6 U	1 U	0.5 U	0.5 U	0.3 J	0.3 J 1	0.30 UJ	0.090 UJ
11	102	Surface Water	TIN	Arsenic	ug/l	0.7 U	0.7 U	0.9 U	1.3 U	1.3 U	0.89 J	0.63 J	2.9 U	5 U	1 U	1 U	1 U	1 U 1	0.24 UJ	0.56
11	102	Surface Water	TIN	Barium	ug/l	9.5 J	9.6 J	9.6 J	7.8 J	8.3 J	9.8 J	12.9 J	13.6 J	8.64	9.23	8.56				
11	102	Surface Water	TIN	Beryllium	ug/l	0.2 U	0.2 U	0.3 U	0.2 U	0.21 U	0.33 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U 1	0.043 U	0.020 U
11	102	Surface Water	TIN	Cadmium	ug/l	0.1 U	0.2 U	0.1 U	0.13 J	0.1 U	0.047 U	0.053 U	0.3 U	2 U	0.2 U	0.2 U	1 U	1 U 1	0.39 J	0.020 U
11	102	Surface Water	TIN	Calcium	ug/l	20600	22100	21900	9580	16800	22200	23200	15100	22400	20600					
11	102	Surface Water	TIN	Chromium	ug/l	0.3 U	0.35 J	0.21 U	0.55 U	0.25 J	6.4 U	0.6 U	0.8 J	6 U	0.156	0.175 J	1.11	1.11 1	0.12 U	0.20 U
11	102	Surface Water	TIN	Cobalt	ug/l	0.1 U	0.1 U	0.1 U	0.15 J	0.12 J	2.9 U	1.7 J	0.5 U	0.8 U	0.1 U	0.1 U				
11	102	Surface Water	TIN	Copper	ug/l	2 U	4.3 J	5.2 U	6.6 J	7 J	2.1 U	5	3.6 J	6 U	0.665	0.5 U	4.75	4.75 0.848	0.86 J	0.49
11	102	Surface Water	TIN	Iron	ug/l	414	364	322	532	656	209	729	1190	1000 U	199					
11	102	Surface Water	TIN	Lead	ug/l	0.64 U	0.82 U	0.46 U	2.1	0.98 J	0.019 U	0.52 J	7 J	2 U	0.326	0.331	0.93 J	0.93 J 0.305	0.30 J	0.125
11	102	Surface Water	TIN	Magnesium	ug/l	5470	5540	5820	3220	4550	5480	5750	5940	5430	6080					
11	102	Surface Water	TIN	Manganese	ug/l	20.3	18.1	23.4	24.8	24.8 J	18.4	18.4	72.6	12.2	15.6	12				
11	102	Surface Water	TIN	Mercury	ug/l	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U 0.2	0.018 UJ	0.20 U
11	102	Surface Water	TIN	Nickel	ug/l	0.39 J	0.64 U	11.5 U	9.3 U	9.3 U	5.6 J	1.1 J	0.7 U	2 U	0.886	0.921	0.78 J	0.78 J 2	50 UJ	0.72 U
11	102	Surface Water	TIN	Potassium	ug/l	1070	1040	1320	1430	1490	995	1160	2010 J	1040	1140					
11	102	Surface Water	TIN	Selenium	ug/l	0.8 U	0.9 J	0.8 U	0.8 U	0.8 U	0.88 J	2.6 J	1.1 U	5 U	0.714	0.5 U	1 U	1 U 2	0.37 J	1.2 U
11	102	Surface Water	TIN	Silver	ug/l	2.5 U	3.3 U	1.8 U	4.1 U	4.1 U	3 U	0.5 U	0.7 U	2 U	0.35 U	0.466 J	1 U	1 U 1	0.085 U	0.030 U
11	102	Surface Water	TIN	Sodium	ug/l	18500	16900	18000	15300	16600	17400	17700	23100		17100					
11	102	Surface Water	TIN	Thallium	ug/l	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.008 U	8.4	3.5 U	1 U	0.25 U	0.25 U	1 U	1 U 1	0.044 U	0.020 U
11	102	Surface Water	TIN	Vanadium	ug/l	1.9 U	0.22 J	0.17 J	0.71 J	0.65 J	2 U	0.3 J	1.1 J	20 U	1 U	1 U				
11	102	Surface Water	TIN	Zinc	ug/l	8.4 U	9.5 J	11 J	34.4	19.5 J	12.8 J	10.8	67.5	25 U	11.4	5.39	22.2	22.2 14.7	8.4 J	4.54
11	102	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l									1 U	2 U					
11	102	Surface Water	VOA	1,1,1-Trichloroethane	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l						1 U		1 U	2 U	2 U					
11	102	Surface Water	VOA	1,1,2-Trichloroethane	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U					
11	102	Surface Water	VOA	1,1-Dichloroethane	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	1,1-Dichloroethene	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	1,1-Dichloropropene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	1,2,3-Trichloropropane	ug/l									2 U	2 U					
11	102	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l						1 U			2 U	2 U					
11	102	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l						1 U			2.5 U	10 U					
11	102	Surface Water	VOA	1,2-Dibromoethane	ug/l						1 U			1 U	2 U					
11	102	Surface Water	VOA	1,2-Dichlorobenzene	ug/l						1 U			1 U	2 U					
11	102	Surface Water	VOA	1,2-Dichloroethane	ug/l						1 U		1 U	2 U	2 U					
11	102	Surface Water	VOA	1,2-Dichloropropane	ug/l						1 U		1 U	2 U	2 U					
11	102	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	1,3-Dichlorobenzene	ug/l						1 U			1 U	2 U					
11	102	Surface Water	VOA	1,3-Dichloropropane	ug/l									1 U	2 U					
11	102	Surface Water	VOA	1,3-Dichloropropene	ug/l						1 U									

Table C-2-B
Summary of Chemicals for Surface Water at Palisades Landfill

SMWU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration														
						5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008
11	102	Surface Water	VOA	1,4-Dichlorobenzene	ug/l						1 U			1 U	2 U					
11	102	Surface Water	VOA	2,2-Dichloropropane	ug/l									1 U	2 U					
11	102	Surface Water	VOA	2-Butanone	ug/l						5 U		5 U	50 U	50 U					
11	102	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l									10 U	10 U					
11	102	Surface Water	VOA	2-Chlorotoluene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	2-Hexanone	ug/l						5 U		5 U	10 U	20 U					
11	102	Surface Water	VOA	4-Chlorotoluene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	4-Isopropyltoluene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	4-Methyl-2-pentanone	ug/l						5 U		5 U	10 U	20 U					
11	102	Surface Water	VOA	Acetone	ug/l						5 U		5 U		50 U					
11	102	Surface Water	VOA	Acrylonitrile	ug/l										10 U					
11	102	Surface Water	VOA	Benzene	ug/l	0.3 U	0.2 U	0.1 U	0.1 U	1 U	1 U	0.2 U	1 U	0.5 U	2 U					
11	102	Surface Water	VOA	Bromobenzene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	Bromochloromethane	ug/l						1 U			1 U	2 U					
11	102	Surface Water	VOA	Bromodichloromethane	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	Bromoform	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	Bromomethane	ug/l						1 U		1 U	2 U	5 U					
11	102	Surface Water	VOA	BTEX (total)	ug/l	1 U	0.9 U	0.2 U	0.2 U	2 U	2 U									
11	102	Surface Water	VOA	Carbon disulfide	ug/l						1 U		1 U	10 U	2 U					
11	102	Surface Water	VOA	Carbon tetrachloride	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	Chlorobenzene	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	Chloroethane	ug/l						1 U		1 U	1 U	5 U					
11	102	Surface Water	VOA	Chloroform	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	Chloromethane	ug/l						1 U		1 U	1 U	5 U					
11	102	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	Dibromochloromethane	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	Dibromomethane	ug/l									2 U	2 U					
11	102	Surface Water	VOA	Dichlorodifluoromethane	ug/l								1 U	1 U	5 U					
11	102	Surface Water	VOA	Ethylbenzene	ug/l	0.4 U	0.2 U	0.1 U	0.1 U	1 U	1 U	0.2 U	1 U	1 U	2 U					
11	102	Surface Water	VOA	Hexachlorobutadiene	ug/l									2 U	2 U					
11	102	Surface Water	VOA	Iodomethane	ug/l										5 U					
11	102	Surface Water	VOA	Isopropylbenzene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	m,p-Xylene	ug/l								1 U		2 U					
11	102	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l										2 U					
11	102	Surface Water	VOA	Methylene chloride	ug/l						0.12 J		1 U	5 U	5 U					
11	102	Surface Water	VOA	m-Xylene	ug/l						2 U	0.56								
11	102	Surface Water	VOA	Naphthalene	ug/l									2 U	2 U					
11	102	Surface Water	VOA	n-Butylbenzene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	n-Propylbenzene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	o-Xylene	ug/l						1 U	0.2 U	1 U		2 U					
11	102	Surface Water	VOA	sec-Butylbenzene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	Styrene	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	tert-Butylbenzene	ug/l									1 U	2 U					
11	102	Surface Water	VOA	Tetrachloroethene	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	Toluene	ug/l	0.5 U	0.9 U	0.2 U	0.2 U	1 U	1 U	0.3 U	1 U	1 U	2 U					
11	102	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l										10 U					
11	102	Surface Water	VOA	Trichloroethene	ug/l						1 U		1 U	1 U	2 U					
11	102	Surface Water	VOA	Trichlorofluoromethane	ug/l								1 U	1 U	2 U					
11	102	Surface Water	VOA	Vinyl acetate	ug/l										5 U					
11	102	Surface Water	VOA	Vinyl chloride	ug/l						1 U		1 U	2 U	2 U					
11	102	Surface Water	VOA	Xylenes	ug/l	1 U	0.5 U	0.2 U	0.2 U	2 U	1 U			2 U						

Table C-2-B
Summary of Chemicals for Surface Water at Palisades Landfill

SMWU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration														
						5/1996	8/1996	11/1996	2/1997	5/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008
11	102	Surface Water	VOA	Xylenes (total)	ug/l	1 U	0.5 U	0.2 U	0.2 U	2 U	2 U									

Notes:

Blank cells in the concentration columns indicate that a sample was not collected from that location or the sample was not analyzed for that chemical.
J - estimated value
U - not detected, value shown is the quantitation limit
UJ - Estimated quantitation limit
ug/l - microgram/liter

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-1	Groundwater	DIN	Aluminum	ug/l	63 U	50 U	50 U		132	222		21.7	14.4	10.5						
13	MW13-1	Groundwater	DIN	Antimony	ug/l	5 U	5 U	5 U		0.046 U	0.087 U		0.5 U	0.112	0.213	1 U	1 U	0.48 UJ	0.10 J		
13	MW13-1	Groundwater	DIN	Arsenic	ug/l	2 U	2.8	2.3		3.6	6.2		7.75	5.55	5.18	4.74	4.83	4.5	4.94	4.80	4.87
13	MW13-1	Groundwater	DIN	Barium	ug/l	11.7 J	12.1 J	9.1 J		10.2 J	13 J		13.8	9.05	9.13	11.8	12.9	12.6		11.3	9.84
13	MW13-1	Groundwater	DIN	Beryllium	ug/l	1 U	1 U	1 U		0.33 U	0.28 U		0.5 U	0.15 U	0.15 U	1 U	1 U	0.043 U	0.020 U		
13	MW13-1	Groundwater	DIN	Cadmium	ug/l	3.5 J	1 U	1 U		0.047 U	0.053 U		2 U	0.2 U	0.2 U	1 U	0.1 U	0.23	0.020 U		
13	MW13-1	Groundwater	DIN	Calcium	ug/l	34800	42800	32300		46300	73400		77100	50400	64000						
13	MW13-1	Groundwater	DIN	Chromium	ug/l	5 U	5 U	5 U		6.4 U	20.5		14.2	1.44	2.54	1 U	1 U	1.0 U	0.86 J		
13	MW13-1	Groundwater	DIN	Cobalt	ug/l	5 U	5 U	5 U		2.9 U	0.49 J		0.4 U	0.5 U	3.15						
13	MW13-1	Groundwater	DIN	Copper	ug/l	3.4 J	2 U	2 U		2.1 U	2.5 J		3 U	0.32	4.71 J	2 U	1.62 J	1.3 J	0.34		
13	MW13-1	Groundwater	DIN	Iron	ug/l	4470	10500	9120 J		14900	21600		27500	13200	13000						
13	MW13-1	Groundwater	DIN	Lead	ug/l	2 U	2 U	1 U		0.019 U	0.28 J		0.3 U	0.113	0.425	1 U	1 U	0.075 U	0.030 U		
13	MW13-1	Groundwater	DIN	Magnesium	ug/l	14800	15800	11500		15200	25400		24800	17400	17000						
13	MW13-1	Groundwater	DIN	Manganese	ug/l	1180	1380	1080		1500	2540		2940	1840	1430						
13	MW13-1	Groundwater	DIN	Mercury	ug/l	0.25 J	0.2 U	0.2 UJ		0.1 U	0.2 U		0.2 U		0.2 U	0.24	0.0659 J	0.0715 J	0.20 U		
13	MW13-1	Groundwater	DIN	Nickel	ug/l	5 U	5 U	5 U		3.6 U	17.2 J		1.62	1.71	2.39	1.07 UJ	1.26 J	2.8	1.90		
13	MW13-1	Groundwater	DIN	Potassium	ug/l	5880	6260	6050 J		5930	7970		8140	7300	8200						
13	MW13-1	Groundwater	DIN	Selenium	ug/l	3 U	3 U	2 U		1.2 J	3.4		2.5 U	0.541	2.51	1 U	2 U	1.6 UJ	1.7 J		
13	MW13-1	Groundwater	DIN	Silver	ug/l	5 U	5 U	5 U		3 U	0.5 U		1 U	0.1 U	0.1 U	1 U	1 U	0.085 U	0.030 U		
13	MW13-1	Groundwater	DIN	Sodium	ug/l	78600	77100	66100		58500	94900			85400	110000						
13	MW13-1	Groundwater	DIN	Thallium	ug/l	3 UJ	3 U	2 U		0.008 U	0.012 U		0.5 U	0.05 U	0.0503	1 U	1 U	0.044 U	0.020 U		
13	MW13-1	Groundwater	DIN	Vanadium	ug/l	5 U	5 U	5 U		2 U	2.5 J		10 U	5 U	7.54						
13	MW13-1	Groundwater	DIN	Zinc	ug/l	5 U	5 U	5 U		7.5 J	7		10 U	9.19	4.69	5 U	1.88 J	4.5 J	1.78 J		
13	MW13-1	Groundwater	P/A	4,4-DDD	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U	0.02 U		0.033 U	0.021 U							
13	MW13-1	Groundwater	P/A	4,4-DDE	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U	0.02 U		0.033 U	0.021 U							
13	MW13-1	Groundwater	P/A	4,4-DDT	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U	0.02 U		0.033 U	0.021 U							
13	MW13-1	Groundwater	P/A	Aldrin	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U	0.01 U		0.033 U	0.0092 U							
13	MW13-1	Groundwater	P/A	alpha-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U	0.01 U		0.033 U	0.011 U							
13	MW13-1	Groundwater	P/A	alpha-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U	0.01 U		0.033 U	0.01 U							
13	MW13-1	Groundwater	P/A	Aroclor 1016	ug/l	0.2 U	0.2 U	0.2 U		0.217 U	0.2 U		0.109 U	0.52 U							
13	MW13-1	Groundwater	P/A	Aroclor 1221	ug/l	0.4 U	0.4 U	0.4 U		0.435 U	0.4 U		0.109 U	0.52 U							
13	MW13-1	Groundwater	P/A	Aroclor 1232	ug/l	0.2 U	0.2 U	0.2 U		0.217 U	0.2 U		0.109 U	0.52 U							
13	MW13-1	Groundwater	P/A	Aroclor 1242	ug/l	0.2 U	0.2 U	0.2 U		0.217 U	0.2 U		0.109 U	0.52 U							
13	MW13-1	Groundwater	P/A	Aroclor 1248	ug/l	0.2 U	0.2 U	0.2 U		0.217 U	0.2 U		0.109 U	0.52 U							
13	MW13-1	Groundwater	P/A	Aroclor 1254	ug/l	0.2 U	0.2 U	0.2 U		0.217 U	0.2 U		0.109 U	0.52 U							
13	MW13-1	Groundwater	P/A	Aroclor 1260	ug/l	0.2 U	0.2 U	0.2 U		0.217 U	0.2 U		0.109 U	0.52 U							
13	MW13-1	Groundwater	P/A	beta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U	0.01 U		0.033 U	0.012 U							
13	MW13-1	Groundwater	P/A	Chlordane	ug/l									0.01 U							
13	MW13-1	Groundwater	P/A	Chlordane (total)	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U											
13	MW13-1	Groundwater	P/A	DDT (total)	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U											
13	MW13-1	Groundwater	P/A	delta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U	0.01 U		0.033 U	0.011 U							
13	MW13-1	Groundwater	P/A	Dieldrin	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U	0.02 U		0.033 U	0.021 U							
13	MW13-1	Groundwater	P/A	Endosulfan (total)	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U											
13	MW13-1	Groundwater	P/A	Endosulfan I	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U	0.01 U		0.033 U	0.021 U							
13	MW13-1	Groundwater	P/A	Endosulfan II	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U	0.02 U		0.033 U	0.021 U							
13	MW13-1	Groundwater	P/A	Endosulfan sulfate	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U	0.02 U		0.033 U	0.021 U							
13	MW13-1	Groundwater	P/A	Endrin	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U	0.02 U		0.033 U	0.021 U							
13	MW13-1	Groundwater	P/A	Endrin Aldehyde	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U	0.02 U		0.033 U	0.022 U							
13	MW13-1	Groundwater	P/A	Endrin ketone	ug/l	0.02 U	0.02 U	0.02 U		0.0217 U	0.02 U		0.033 U								
13	MW13-1	Groundwater	P/A	gamma-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U	0.01 U		0.033 U	0.01 U							
13	MW13-1	Groundwater	P/A	Heptachlor	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U	0.01 U		0.033 U	0.019 U							
13	MW13-1	Groundwater	P/A	Heptachlor epoxide	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U	0.01 U		0.033 U	0.0088 U							
13	MW13-1	Groundwater	P/A	Lindane	ug/l	0.01 U	0.01 U	0.01 U		0.0109 U	0.01 U		0.033 U	0.01 U							
13	MW13-1	Groundwater	P/A	Methoxychlor	ug/l	0.1 U	0.1 UJ	0.1 UJ		0.109 U	0.1 U		0.033 U	0.052 U							
13	MW13-1	Groundwater	P/A	PCB (Sum Detect + .5 NonDetect)	ug/l	0.4 U	0.4 U	0.4 U		0.435 U											
13	MW13-1	Groundwater	P/A	Toxaphene	ug/l	1 U	1 U	1 U		1.09 U	1 U		2.7 U	0.52 U							
13	MW13-1	Groundwater	SVOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U					29 U		5.1 U						

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-1	Groundwater	SVOA	1,2-Dichlorobenzene	ug/l								23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	1,3-Dichlorobenzene	ug/l								23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	1,4-Dichlorobenzene	ug/l								23 U								
13	MW13-1	Groundwater	SVOA	2,2-oxybis(1-Chloropropane)	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	2,4,5-Trichlorophenol	ug/l	5 U	5 U	5 U		22 U	20 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	2,4,6-Trichlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	2,4-Dichlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	2,4-Dimethylphenol	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		26 U						
13	MW13-1	Groundwater	SVOA	2,4-Dinitrophenol	ug/l	5 U	5 U	5 U		22 U	20 U		210 U		100 U						
13	MW13-1	Groundwater	SVOA	2,4-Dinitrotoluene	ug/l	1 U	1 U	2 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	2,6-Dinitrotoluene	ug/l	2 U	1 U	2 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	2-Chloronaphthalene	ug/l	1 U	1 U	1 U		5 U	5 U		29 U		10 U						
13	MW13-1	Groundwater	SVOA	2-Chlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	2-Methylnaphthalene	ug/l	1 U	1 U	1 U		5 U	5 U		29 U	0.051 U	0.058 U					0.0053 J	
13	MW13-1	Groundwater	SVOA	2-Methylphenol	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	2-Nitroaniline	ug/l	5 U	5 U	5 U		22 U	20 U		23 U		100 U						
13	MW13-1	Groundwater	SVOA	2-Nitrophenol	ug/l	2 U	1 U	2 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	3,3-Dichlorobenzidine	ug/l	5 UJ	1 U	1 UJ		5 U	5 U		23 U		20 U						
13	MW13-1	Groundwater	SVOA	3-Nitroaniline	ug/l	5 U	5 U	5 U		22 U	20 U		23 U		51 U						
13	MW13-1	Groundwater	SVOA	4,6-Dinitro-2-methylphenol	ug/l	5 U	5 U	5 U		22 U	20 U		210 U		26 U						
13	MW13-1	Groundwater	SVOA	4-Bromophenyl-phenylether	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	4-Chloro-3-methylphenol	ug/l	1 U	1 U	2 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	4-Chloroaniline	ug/l	2 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	4-Chlorophenyl methylsulfone	ug/l										20 U						
13	MW13-1	Groundwater	SVOA	4-Chlorophenyl-phenylether	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	4-Methylphenol	ug/l	2 U	1 U	1 U		5 U	5 U				5.1 U						
13	MW13-1	Groundwater	SVOA	4-Nitroaniline	ug/l	5 U	5 U	5 U		22 U	20 U		23 U		51 U						
13	MW13-1	Groundwater	SVOA	4-Nitrophenol	ug/l	5 U	5 U	5 UJ		22 U	20 U		160 U		100 U						
13	MW13-1	Groundwater	SVOA	Acenaphthene	ug/l	1 U	1 U	0.5 U		1.1 U	1 U		29 U	0.051 U	0.058 U	0.1 U				0.049	
13	MW13-1	Groundwater	SVOA	Acenaphthylene	ug/l	1 U	1 U	0.5 U		1.1 U	2 U		23 U	0.051 U	0.058 U					0.020 U	
13	MW13-1	Groundwater	SVOA	Aniline	ug/l								23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	Anthracene	ug/l	0.66 U	0.1 U	0.5 U		0.11 U	0.1 U		23 U	0.3 U	0.35 U	0.1 U				0.018 J	
13	MW13-1	Groundwater	SVOA	Azobenzene	ug/l								230 U								
13	MW13-1	Groundwater	SVOA	Benzidine	ug/l										200 U						
13	MW13-1	Groundwater	SVOA	Benzo(a)anthracene	ug/l	0.01 U	0.2 U	0.01 U		0.11 U	0.1 U		23 U	0.051 U	0.058 U					0.020 U	
13	MW13-1	Groundwater	SVOA	Benzo(a)pyrene	ug/l	0.02 U	0.25 U	0.02 U		0.11 U	0.1 U		23 U	0.064 U	0.073 U	0.1 U				0.020 U	
13	MW13-1	Groundwater	SVOA	Benzo(b)fluoranthene	ug/l	0.02 U	1 U	0.02 U		0.11 U	0.2 U		23 U	0.051 U	0.058 U	0.1 U				0.020 U	
13	MW13-1	Groundwater	SVOA	Benzo(g,h,i)perylene	ug/l	0.08 U	0.75 U	0.08 UJ		0.11 U	0.2 U		29 U	0.091 U	0.058 U	0.1 U				0.020 U	
13	MW13-1	Groundwater	SVOA	Benzo(k)fluoranthene	ug/l	0.02 U	0.3 U	0.02 UJ		0.11 U	0.1 U		29 U	0.1 U	0.058 U	0.1 U				0.020 U	
13	MW13-1	Groundwater	SVOA	Benzofluoranthenes (total)	ug/l	0.02 U	1 U	0.02 U		0.11 U											
13	MW13-1	Groundwater	SVOA	Benzoic acid	ug/l								57 U		130 U						
13	MW13-1	Groundwater	SVOA	Benzyl alcohol	ug/l								23 U		10 U						
13	MW13-1	Groundwater	SVOA	bis(2-Chloroethoxy)methane	ug/l	1 U	1 U	1 U		5 U	5 U		29 U		5.1 U						
13	MW13-1	Groundwater	SVOA	bis(2-Chloroethyl)ether	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	bis(2-Ethylhexyl)adipate												10 U					
13	MW13-1	Groundwater	SVOA	bis(2-Ethylhexyl)phthalate	ug/l	1	1 U	1 U		5 U	0.72 J		23 U		5.1 U	0.583 UJ		0.50 U		3.3	
13	MW13-1	Groundwater	SVOA	Butylbenzylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	Chrysene	ug/l	0.15 U	0.2 U	0.15 U		0.054 U	0.1 U		23 U	0.051 U	0.058 U					0.020 U	
13	MW13-1	Groundwater	SVOA	CPAH (total)	ug/l	0.15 U	1 U	0.15 U		0.54 U											
13	MW13-1	Groundwater	SVOA	Dibenz(a,h)anthracene	ug/l	0.03 U	1 U	0.03 U		0.54 U	0.2 U		29 U	0.15 U	0.058 U					0.020 U	
13	MW13-1	Groundwater	SVOA	Dibenzofuran	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	Diethylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	Dimethylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	Di-n-butylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	Di-n-octylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	Fluoranthene	ug/l	0.21 U	0.5 U	0.21 UJ		0.54 U	0.2 U		23 U	0.051 U	0.058 U	0.0572 J				0.025	
13	MW13-1	Groundwater	SVOA	Fluorene	ug/l	0.21 U	0.5 U	0.21 UJ		0.11 U	0.1 U		23 U	0.12 U	0.058 U	0.1 U				0.020 U	

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-1	Groundwater	SVOA	Hexachlorobenzene	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U	5 U					
13	MW13-1	Groundwater	SVOA	Hexachlorobutadiene	ug/l	1 U	1 U	2 U		5 U	5 U		34 U		5.1 U						
13	MW13-1	Groundwater	SVOA	Hexachlorocyclopentadiene	ug/l	2 U	1 U	1 U		5 U	5 U		34 U		10 U	10 UJ					
13	MW13-1	Groundwater	SVOA	Hexachloroethane	ug/l	1 U	1 U	2 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	HPAH (total)	ug/l	0.27 U	1 U	0.27 U		0.54 U											
13	MW13-1	Groundwater	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.04 U	0.3 U	0.04 U		0.11 U	0.1 U		23 U	0.2 U	0.058 U					0.020 U	
13	MW13-1	Groundwater	SVOA	Isophorone	ug/l	1 U	1 U	1 U		5 U	5 U		29 U		5.1 U						
13	MW13-1	Groundwater	SVOA	LPAH (total)	ug/l	1 U	1 U	0.5 U		2.2 U											
13	MW13-1	Groundwater	SVOA	m,p-Cresols	ug/l								23 U								
13	MW13-1	Groundwater	SVOA	Naphthalene	ug/l	1 U	1 U	0.5 UJ		2.2 U	1 U		23 U	0.24 U	0.28 U	0.1 U				0.086	
13	MW13-1	Groundwater	SVOA	NCPAH (total)	ug/l	1 U	1 U	1 U		5 U											
13	MW13-1	Groundwater	SVOA	Nitrobenzene	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	N-Nitrosodimethylamine	ug/l								23 U								
13	MW13-1	Groundwater	SVOA	N-Nitrosodinpropylamine	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		5.1 U						
13	MW13-1	Groundwater	SVOA	N-Nitrosodiphenylamine	ug/l	1 U	1 U	1 U		5 U	5 U		23 U		10 U						
13	MW13-1	Groundwater	SVOA	Pentachlorophenol	ug/l	5 U	5 U	5 U		22 U	20 U		160 U		5.1 U	1 U					
13	MW13-1	Groundwater	SVOA	Phenanthrene	ug/l	0.64 U	0.25 U	0.5 U		0.11 U	0.1 U		23 U	0.051 U	0.058 U					0.020 U	
13	MW13-1	Groundwater	SVOA	Phenol	ug/l	1 U	1 U	1 U		5 U	5 U		11 U		5.1 U						
13	MW13-1	Groundwater	SVOA	Pyrene	ug/l	0.27 U	0.1 U	0.27 UJ		0.11 U	0.1 U		23 U	0.051 U	0.058 U	0.1 U				0.0039 J	
13	MW13-1	Groundwater	TIN	Aluminum	ug/l	259 UJ	52.4 J	50 U	267	132	47.6 J		95.2	25.8	50.2						
13	MW13-1	Groundwater	TIN	Antimony	ug/l	5 U	5 U	5 U	5 U	0.046 U	0.087 U		1 U	0.5 U	0.5 U	1 U	1 U	0.41 UJ	0.05 J		
13	MW13-1	Groundwater	TIN	Arsenic	ug/l	2 UJ	2.5	2.5	3.5	3.5	6.4		7.24	5.35	6.44	5.4	7.86	5.3	5.25	5.50	5.04
13	MW13-1	Groundwater	TIN	Barium	ug/l	8.9 J	10.1 J	8.5 J	9.1	10.2 J	13.4 J		15.3	9.58	9.5	12	13.6	13.6 J		11.6	9.86
13	MW13-1	Groundwater	TIN	Beryllium	ug/l	1 U	1 U	1 U	0.26 U	0.33 U	0.28 U		1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U		
13	MW13-1	Groundwater	TIN	Cadmium	ug/l	1 U	1 U	1 U	0.057 UJ	0.047 U	0.053 U		2 U	0.2 U	0.2 U	1 U	0.1 U	0.094 U	0.023 J		
13	MW13-1	Groundwater	TIN	Calcium	ug/l	34200	42900	32200	40200	46300	61700		76700	49500							
13	MW13-1	Groundwater	TIN	Chromium	ug/l	5 U	5 U	5 U	4 UJ	6.4 U	3.8 J		6.11	0.223	0.432 J	1 U	1 U	1.0 U	0.67 J		
13	MW13-1	Groundwater	TIN	Cobalt	ug/l	5 U	5 U	5 U	4 U	2.9 U	0.5 J		0.8 U	0.169	0.214						
13	MW13-1	Groundwater	TIN	Copper	ug/l	2.5 J	2 U	2 U	4 UJ	2.1 U	1.3 J		6 U	0.5 U	0.5 U	2 U	1.09 J	1.4 J	0.45		
13	MW13-1	Groundwater	TIN	Iron	ug/l	6510 J	10900	9230	10900	14900	21700		27300	13900							
13	MW13-1	Groundwater	TIN	Lead	ug/l	2 U	2 U	1 U	2 U	0.019 U	0.39 J		2 U	0.15 U	0.15 U	1 U	1 U	0.075 U	0.063		
13	MW13-1	Groundwater	TIN	Magnesium	ug/l	14700	16000	11400	14300	15200	21800		26300	18300							
13	MW13-1	Groundwater	TIN	Manganese	ug/l	1180	1400	1070	1490	1500	2590		2920	1890	1410						
13	MW13-1	Groundwater	TIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ	0.1 U	0.13 J	0.2 U		0.2 U	0.2 U	0.2 U	0.202	0.157 J	0.0180 UJ	0.20 U		
13	MW13-1	Groundwater	TIN	Nickel	ug/l	5 U	5 U	5 U	4 U	3.6 U	3 J		2 U	1.84	2.29	2.86 J	1.25 J	2.9	1.65		
13	MW13-1	Groundwater	TIN	Potassium	ug/l	5760	6100	5930 J	6190	5930	6860		8090	7420							
13	MW13-1	Groundwater	TIN	Selenium	ug/l	3 U	3 U	2 U	3 U	0.76 J	3.4		5 U	0.568	0.573	1.28 U	2 U	1.8 UJ	2.7 J		
13	MW13-1	Groundwater	TIN	Silver	ug/l	5 U	5 U	5 U	4 U	3 U	0.5 U		2 U	0.35 U	2.05 J	1 U	1 U	0.085 U	0.030 U		
13	MW13-1	Groundwater	TIN	Sodium	ug/l	78400	76600	64900	76200	58500	83100			93900							
13	MW13-1	Groundwater	TIN	Thallium	ug/l	3 UJ	3 U	2 U	10 U	0.43 J	0.012 U		1.09	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U		
13	MW13-1	Groundwater	TIN	Vanadium	ug/l	5 U	5 U	5 U	3 UJ	2 U	2.8 J		20 U	2.04	2.67						
13	MW13-1	Groundwater	TIN	Zinc	ug/l	5 U	5 U	5 U	44.7 U	7.5	2.8 J		25 U	6.65	1.34	5 U	2.47 J	5.0 U	2.00 J		
13	MW13-1	Groundwater	VOA	1,1,1,2-Tetrachloroethane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	1,1,1-Trichloroethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	1,1,2-Trichloroethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	1,1,2-Trichlorotrifluoroethane	ug/l									2 U	2 U						
13	MW13-1	Groundwater	VOA	1,1-Dichloroethane	ug/l	0.26 J	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	1,1-Dichloroethene	ug/l	1 UJ	1 UJ	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	1,1-Dichloropropene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	1,2,3-Trichlorobenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	1,2,3-Trichloropropane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	1,2,4-Trichlorobenzene	ug/l					10 U	1 U			2 U	2 U	0.57 J		1.0 U		2.0 U	
13	MW13-1	Groundwater	VOA	1,2,4-Trimethylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			10 U	10 U	5 UJ		1.0 U		2.0 U	
13	MW13-1	Groundwater	VOA	1,2-Dibromoethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW13-1	Groundwater	VOA	1,2-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	

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						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-1	Groundwater	VOA	1,2-Dichloroethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	1,2-Dichloropropane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	1,3,5-Trimethylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	1,3-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	10 U	1 U			2 U	2 U	0.19 J		1.0 U		0.20 J	
13	MW13-1	Groundwater	VOA	1,3-Dichloropropane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U												
13	MW13-1	Groundwater	VOA	1,4-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	2,2-Dichloropropane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	2-Butanone	ug/l	5 UJ	5 U	5 U		50 U	5 U			50 U	50 U	10 UJ		5.0 U			
13	MW13-1	Groundwater	VOA	2-Chloroethyl vinyl ether	ug/l									10 U	10 U						
13	MW13-1	Groundwater	VOA	2-Chlorotoluene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	2-Hexanone	ug/l	5 UJ	5 U	5 U	5 U	50 U	5 U			20 U	20 U	10 UJ		5.0 U			
13	MW13-1	Groundwater	VOA	4-Chlorotoluene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	4-Isopropyltoluene	ug/l									2 U	2 U	2 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	4-Methyl-2-pentanone	ug/l	5 UJ	5 U	5 U	5 U	50 U	5 U			20 U	20 U	5 UJ		5.0 U			
13	MW13-1	Groundwater	VOA	Acetone	ug/l	5 UJ	5 U	5 U		50 U	5 U			50 U	50 U	25 UJ		1.9 J		20 UJ	
13	MW13-1	Groundwater	VOA	Acrylonitrile	ug/l									10 U	10 U						
13	MW13-1	Groundwater	VOA	Benzene	ug/l	0.2 UJ	0.34	0.2 U	1 U	0.2 U	1 U			2 U	2 U	1 UJ		1.0 U		0.26 J	
13	MW13-1	Groundwater	VOA	Bromobenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Bromochloromethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Bromodichloromethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Bromoform	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Bromomethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			5 U	5 U	5 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	BTEX (total)	ug/l	0.2 U	0.34	0.2 U	1 U	0.4 U											
13	MW13-1	Groundwater	VOA	Carbon disulfide	ug/l	1 UJ	1 U	1 U	6	10 U	1 U			2 U	1.2 J	10 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	Carbon tetrachloride	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	Chlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	Chloroethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			5 U	5 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	Chloroform	ug/l	1 UJ	1 U	1 U	1 U	1.1 J	1 U			2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Chloromethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			5 U	5 U	5 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	cis-1,2-Dichloroethene	ug/l	0.36 J	1 U	0.56 J	0.62 J	1.7 J	1 U			0.6 J	0.51 J	0.24 J		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	cis-1,3-Dichloropropene	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Dibromochloromethane	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Dibromomethane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Dichlorodifluoromethane	ug/l									5 U	5 U	5 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Ethylbenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	Hexachlorobutadiene	ug/l									2 U	2 U	4 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Iodomethane	ug/l									5 U	5 U						
13	MW13-1	Groundwater	VOA	Isopropylbenzene	ug/l									2 U	2 U	2 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	m,p-Xylene	ug/l	0.2 UJ	0.2 U	0.2 U						2 U	0.39 J	2 UJ		2.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	Methyl Tert-Butyl Ether	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Methylene chloride	ug/l	2 UJ	1 U	1 U	2 U	7.1 J	2 U			5 U	0.97 U	5 UJ		1.0 U		2.0 U	
13	MW13-1	Groundwater	VOA	m-Xylene	ug/l					0.4 U											
13	MW13-1	Groundwater	VOA	Naphthalene	ug/l									2 U	0.88 J	2 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	n-Butylbenzene	ug/l									2 U	2 U	5 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	n-Propylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	o-Xylene	ug/l	0.2 UJ	0.2 U	0.2 U		0.2 U				2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	sec-Butylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Styrene	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	tert-Butylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	Tetrachloroethene	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	Toluene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.3 U	1 U			2 U	2 U	1 UJ		1.0 U		0.62 U	
13	MW13-1	Groundwater	VOA	trans-1,2-Dichloroethene	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	trans-1,3-Dichloropropene	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 U	1 UJ		1.0 U			
13	MW13-1	Groundwater	VOA	trans-1,4-Dichloro-2-butene	ug/l									10 U	10 U						
13	MW13-1	Groundwater	VOA	Trichloroethene	ug/l	1.4 J	0.2 J	0.78 J	0.71 J	5.2 J	1 U			1.1 J	0.72 J	0.37 J		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	Trichlorofluoromethane	ug/l									2 U	2 U	1 UJ		1.0 U			

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-1	Groundwater	VOA	Vinyl acetate	ug/l									5 U	5 U						
13	MW13-1	Groundwater	VOA	Vinyl chloride	ug/l	1 UJ	1 U	1 U	1 U	10 U	1 U			2 U	2 UJ	1 UJ		1.0 U		0.50 U	
13	MW13-1	Groundwater	VOA	Xylenes	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	10 U	1 U									1.0 U	
13	MW13-1	Groundwater	VOA	Xylenes (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.4 U										1.0 U	
13	MW13-2	Groundwater	DIN	Aluminum	ug/l	50 U	78.7 J	50 U		410	43 U	80.6 U	9.89	2.62	3.66						
13	MW13-2	Groundwater	DIN	Antimony	ug/l	5 U	5 U	5 U		0.046 U	0.087 U	1.6 U	0.5 U	0.125	0.151 J	1 U	1 U	0.056 U	0.10 J		
13	MW13-2	Groundwater	DIN	Arsenic	ug/l	2.9 J	4.7 J	2 U		0.53 J	3.8	2.9 U	3.98	1.3	3.19	4.57	6.3	7.7	7.59	7.19	854
13	MW13-2	Groundwater	DIN	Barium	ug/l	8.8 J	5 U	5 U		5.1 J	2.8 J	3 J	2.87	2.71	2.06	2.65	2.8	2.4 J		4.24	1.98
13	MW13-2	Groundwater	DIN	Beryllium	ug/l	1 U	1 U	1 U		0.33 U	0.28 U	0.6 U	0.5 U	0.15 U	0.15 U	1 U	1 U	0.043 U	0.434		
13	MW13-2	Groundwater	DIN	Cadmium	ug/l	1 U	1 U	1 U		0.047 U	0.9 J	0.3 U	2 U	0.2 U	0.2 U	1 U	0.1 U	0.14 J	0.036 J		
13	MW13-2	Groundwater	DIN	Calcium	ug/l	21600	12800	17100		17300	20500	19500	19900	20400	23000						
13	MW13-2	Groundwater	DIN	Chromium	ug/l	5 U	5 U	5 U		6.4 U	2.7 J	0.4 U	5.02	1.53	4.08	1 U	1 U	1.0 U	0.73 J		
13	MW13-2	Groundwater	DIN	Cobalt	ug/l	5 U	5 U	5 U		2.9 U	0.043 U	0.5 U	0.4 U	0.5 U	1.28						
13	MW13-2	Groundwater	DIN	Copper	ug/l	2 U	3.6 J	2 U		2.1 U	3.1 J	1.1 U	3 U	1.89	2.05 J	1.95 J	1.5 J	2.0 J	2.60		
13	MW13-2	Groundwater	DIN	Iron	ug/l	20 U	34.4 J	20 U		262	34.7 J	12.8 U	1000 U	50 U	330						
13	MW13-2	Groundwater	DIN	Lead	ug/l	2 U	2 U	1 U		0.019 U	0.11 J	1.6 U	0.3 U	0.1 U	0.133	1 UJ	1 U	0.075 U	3.170		
13	MW13-2	Groundwater	DIN	Magnesium	ug/l	24300	9720	15700		15000	15200	14200	13200	14700	13000						
13	MW13-2	Groundwater	DIN	Manganese	ug/l	249	22.5	4.5 J		35.7	1.2 J	0.9 J	10 U	0.974	9.22						
13	MW13-2	Groundwater	DIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ		0.1 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U		
13	MW13-2	Groundwater	DIN	Nickel	ug/l	5 U	5 U	5 U		3.6 U	2.4 J	0.7 U	1.16	0.786	0.931	0.5 J	0.554 J	1.1 J	2.02		
13	MW13-2	Groundwater	DIN	Potassium	ug/l	11200	5860	6740 J		5860	5930	5820 J	6160	4800	5100						
13	MW13-2	Groundwater	DIN	Selenium	ug/l	3 U	3 U	2 U		0.93 J	3.4	1.1 U	2.5 U	0.5 U	0.958 J	1 U	2 U	2.0 U	5.2 J		
13	MW13-2	Groundwater	DIN	Silver	ug/l	5 U	5 U	5 U		3 U	0.5 U	0.7 U	1 U	0.1 U	0.1 U	1 U	1 U	0.085 U	0.030 U		
13	MW13-2	Groundwater	DIN	Sodium	ug/l	188000	68400	74900		69400	60000	61100 J		47600	51000						
13	MW13-2	Groundwater	DIN	Thallium	ug/l	3 UJ	3 U	2 U		0.008 U	0.012 U	3.5 U	0.5 U	0.05 U	0.052	1 U	1 U	0.044 U	0.020 U		
13	MW13-2	Groundwater	DIN	Vanadium	ug/l	5 U	5 U	5 U		2 U	1.4 J	0.5 J	10 U	5 U	6.37						
13	MW13-2	Groundwater	DIN	Zinc	ug/l	5 U	8.6 J	5 U		5.6 J	6.3	5.1 U	10 U	10.5	1.6	5 U	5 U	5.0 UJ	13.7		
13	MW13-2	Groundwater	P/A	4,4-DDD	ug/l	0.02 U	0.02 U	0.02 U		0.022 U	0.02 U	0.02 U	0.036 U	0.021 U							
13	MW13-2	Groundwater	P/A	4,4-DDE	ug/l	0.02 U	0.02 U	0.02 U		0.022 U	0.02 U	0.02 U	0.036 U	0.021 U							
13	MW13-2	Groundwater	P/A	4,4-DDT	ug/l	0.02 U	0.02 U	0.02 U		0.022 U	0.02 U	0.02 U	0.036 U	0.021 U							
13	MW13-2	Groundwater	P/A	Aldrin	ug/l	0.01 U	0.01 U	0.01 U		0.011 U	0.01 U	0.01 U	0.036 U	0.0092 U							
13	MW13-2	Groundwater	P/A	alpha-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.011 U	0.01 U	0.01 U	0.036 U	0.011 U							
13	MW13-2	Groundwater	P/A	alpha-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.011 U	0.01 U	0.01 U	0.036 U	0.01 U							
13	MW13-2	Groundwater	P/A	Aroclor 1016	ug/l	0.2 U	0.2 U	0.2 U		0.22 U	0.2 U	0.2 U	0.119 U	0.52 U							
13	MW13-2	Groundwater	P/A	Aroclor 1221	ug/l	0.4 U	0.4 U	0.4 U		0.44 U	0.4 U	0.4 U	0.119 U	0.52 U							
13	MW13-2	Groundwater	P/A	Aroclor 1232	ug/l	0.2 U	0.2 U	0.2 U		0.22 U	0.2 U	0.2 U	0.119 U	0.52 U							
13	MW13-2	Groundwater	P/A	Aroclor 1242	ug/l	0.2 U	0.2 U	0.2 U		0.22 U	0.2 U	0.2 U	0.119 U	0.52 U							
13	MW13-2	Groundwater	P/A	Aroclor 1248	ug/l	0.2 U	0.2 U	0.2 U		0.22 U	0.2 U	0.2 U	0.119 U	0.52 U							
13	MW13-2	Groundwater	P/A	Aroclor 1254	ug/l	0.2 U	0.2 U	0.2 U		0.22 U	0.2 U	0.2 U	0.119 U	0.52 U							
13	MW13-2	Groundwater	P/A	Aroclor 1260	ug/l	0.2 U	0.2 U	0.2 U		0.22 U	0.2 U	0.2 U	0.119 U	0.52 U							
13	MW13-2	Groundwater	P/A	beta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.011 U	0.01 U	0.01 U	0.036 U	0.013 U							
13	MW13-2	Groundwater	P/A	Chlordane	ug/l									0.01 U							
13	MW13-2	Groundwater	P/A	Chlordane (total)	ug/l	0.01 U	0.01 U	0.01 U		0.011 U											
13	MW13-2	Groundwater	P/A	DDT (total)	ug/l	0.02 U	0.02 U	0.02 U		0.022 U											
13	MW13-2	Groundwater	P/A	delta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.011 U	0.01 U	0.01 U	0.036 U	0.011 U							
13	MW13-2	Groundwater	P/A	Dieldrin	ug/l	0.02 U	0.02 U	0.02 U		0.022 U	0.02 U	0.02 U	0.036 U	0.021 U							
13	MW13-2	Groundwater	P/A	Endosulfan (total)	ug/l	0.02 U	0.02 U	0.02 U		0.022 U											
13	MW13-2	Groundwater	P/A	Endosulfan I	ug/l	0.01 U	0.01 U	0.01 U		0.011 U	0.01 U	0.01 U	0.036 U	0.021 U							
13	MW13-2	Groundwater	P/A	Endosulfan II	ug/l	0.02 U	0.02 U	0.02 U		0.022 U	0.02 U	0.02 U	0.036 U	0.021 U							
13	MW13-2	Groundwater	P/A	Endosulfan sulfate	ug/l	0.02 U	0.02 U	0.02 U		0.022 U	0.02 U	0.02 U	0.036 U	0.021 U							
13	MW13-2	Groundwater	P/A	Endrin	ug/l	0.02 U	0.02 U	0.02 U		0.022 U	0.02 U	0.02 U	0.036 U	0.021 U							
13	MW13-2	Groundwater	P/A	Endrin Aldehyde	ug/l	0.02 U	0.02 U	0.02 U		0.022 U	0.02 U	0.02 U	0.036 U	0.022 U							
13	MW13-2	Groundwater	P/A	Endrin ketone	ug/l	0.02 U	0.02 U	0.02 U		0.022 U	0.02 U	0.02 U	0.036 U								
13	MW13-2	Groundwater	P/A	gamma-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.011 U	0.01 U	0.01 U	0.036 U	0.01 U							
13	MW13-2	Groundwater	P/A	Heptachlor	ug/l	0.01 U	0.01 U	0.01 U		0.011 U	0.01 U	0.01 U	0.036 U	0.019 U							
13	MW13-2	Groundwater	P/A	Heptachlor epoxide	ug/l	0.01 U	0.01 U	0.01 U		0.011 U	0.01 U	0.01 U	0.036 U	0.0088 U							
13	MW13-2	Groundwater	P/A	Lindane	ug/l	0.01 U	0.01 U	0.01 U		0.011 U	0.01 U	0.01 U	0.036 U	0.01 U							

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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-2	Groundwater	P/A	Methoxychlor	ug/l	0.1 U	0.1 UJ	0.1 UJ		0.11 U	0.1 U	0.1 U	0.036 U	0.052 U							
13	MW13-2	Groundwater	P/A	PCB (Sum Detect + .5 NonDetect)	ug/l	0.4 U	0.4 U	0.4 U		0.44 U											
13	MW13-2	Groundwater	P/A	Toxaphene	ug/l	1 U	1 U	1 U		1.1 U	1 U	1 U	3 U	0.52 U							
13	MW13-2	Groundwater	SVOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				5 U	27 U		5.1 U						
13	MW13-2	Groundwater	SVOA	1,2-Dichlorobenzene	ug/l							5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	1,3-Dichlorobenzene	ug/l							5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	1,4-Dichlorobenzene	ug/l							5 U	22 U								
13	MW13-2	Groundwater	SVOA	2,2-oxybis(1-Chloropropane)	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	2,4,5-Trichlorophenol	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	2,4,6-Trichlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	2,4-Dichlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	2,4-Dimethylphenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		26 U						
13	MW13-2	Groundwater	SVOA	2,4-Dinitrophenol	ug/l	5 U	5 U	5 U		22 U	20 U	10 U	200 U		100 U						
13	MW13-2	Groundwater	SVOA	2,4-Dinitrotoluene	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	2,6-Dinitrotoluene	ug/l	2 U	1 U	2 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	2-Chloronaphthalene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	27 U		10 U						
13	MW13-2	Groundwater	SVOA	2-Chlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	2-Methylnaphthalene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	27 U	0.051 U	0.054 U					0.0087 J	
13	MW13-2	Groundwater	SVOA	2-Methylphenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	2-Nitroaniline	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	22 U		100 U						
13	MW13-2	Groundwater	SVOA	2-Nitrophenol	ug/l	2 U	1 U	2 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	3,3-Dichlorobenzidine	ug/l	5 UJ	1 U	1 UJ		6 U	5 U	5 U	22 U		20 U						
13	MW13-2	Groundwater	SVOA	3-Nitroaniline	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	22 U		51 U						
13	MW13-2	Groundwater	SVOA	4,6-Dinitro-2-methylphenol	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	200 U		26 U						
13	MW13-2	Groundwater	SVOA	4-Bromophenyl-phenylether	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	4-Chloro-3-methylphenol	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	4-Chloroaniline	ug/l	2 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	4-Chlorophenyl methylsulfone	ug/l										20 U						
13	MW13-2	Groundwater	SVOA	4-Chlorophenyl-phenylether	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	4-Methylphenol	ug/l	2 U	1 U	1 U		6 U	5 U	5 U			5.1 U						
13	MW13-2	Groundwater	SVOA	4-Nitroaniline	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	22 U		51 U						
13	MW13-2	Groundwater	SVOA	4-Nitrophenol	ug/l	5 U	5 U	5 UJ		22 U	20 U	5 U	150 U		100 U						
13	MW13-2	Groundwater	SVOA	Acenaphthene	ug/l	1 U	1 U	0.5 U		1.1 U	1 U	1 U	27 U	0.051 U	0.054 U	0.1 U				0.020 U	
13	MW13-2	Groundwater	SVOA	Acenaphthylene	ug/l	1 U	1 U	0.5 U		1.1 U	2 U	2 U	22 U	0.051 U	0.054 U					0.020 U	
13	MW13-2	Groundwater	SVOA	Aniline	ug/l								22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	Anthracene	ug/l	0.66 U	0.1 U	0.5 U		0.11 U	0.1 U	0.1 U	22 U	0.3 U	0.33 U	0.1 U				0.020 U	
13	MW13-2	Groundwater	SVOA	Azobenzene	ug/l								220 U								
13	MW13-2	Groundwater	SVOA	Benzidine	ug/l										200 U						
13	MW13-2	Groundwater	SVOA	Benzo(a)anthracene	ug/l	0.01 U	0.2 U	0.01 U		0.11 U	0.1 U	0.1 U	22 U	0.051 U	0.054 U					0.020 U	
13	MW13-2	Groundwater	SVOA	Benzo(a)pyrene	ug/l	0.02 U	0.25 U	0.02 U		0.11 U	0.1 U	0.1 U	22 U	0.064 U	0.068 U	0.1 U				0.020 U	
13	MW13-2	Groundwater	SVOA	Benzo(b)fluoranthene	ug/l	0.02 U	1 U	0.02 U		0.11 U	0.2 U	0.2 U	22 U	0.051 U	0.054 U	0.1 U				0.020 U	
13	MW13-2	Groundwater	SVOA	Benzo(g,h,i)perylene	ug/l	0.08 U	0.75 U	0.08 UJ		0.11 U	0.2 U	0.2 U	27 U	0.091 U	0.054 U	0.1 U				0.020 U	
13	MW13-2	Groundwater	SVOA	Benzo(k)fluoranthene	ug/l	0.02 U	0.3 U	0.02 UJ		0.11 U	0.1 U	0.1 U	27 U	0.1 U	0.054 U	0.1 U				0.020 U	
13	MW13-2	Groundwater	SVOA	Benzofluoranthenes (total)	ug/l	0.02 U	1 U	0.02 U		0.11 U											
13	MW13-2	Groundwater	SVOA	Benzoic acid	ug/l								55 U		130 U						
13	MW13-2	Groundwater	SVOA	Benzyl alcohol	ug/l								22 U		10 U						
13	MW13-2	Groundwater	SVOA	bis(2-Chloroethoxy)methane	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	27 U		5.1 U						
13	MW13-2	Groundwater	SVOA	bis(2-Chloroethyl)ether	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	bis(2-Ethylhexyl)adipate												10 U					
13	MW13-2	Groundwater	SVOA	bis(2-Ethylhexyl)phthalate	ug/l	33	1 U	1 U		6 U	0.43 J	5 J	22 U		5.1 U	0.571 UJ		0.50 U		2.0 U	
13	MW13-2	Groundwater	SVOA	Butylbenzylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	Carbazole	ug/l							5 U									
13	MW13-2	Groundwater	SVOA	Chrysene	ug/l	0.15 U	0.2 U	0.15 U		0.055 U	0.1 U	0.1 U	22 U	0.051 U	0.054 U					0.020 U	
13	MW13-2	Groundwater	SVOA	CPAH (total)	ug/l	0.15 U	1 U	0.15 U		0.55 U											
13	MW13-2	Groundwater	SVOA	Dibenz(a,h)anthracene	ug/l	0.03 U	1 U	0.03 U		0.55 U	0.2 U	0.2 U	27 U	0.15 U	0.054 U					0.020 U	
13	MW13-2	Groundwater	SVOA	Dibenzofuran	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	Diethylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-2	Groundwater	SVOA	Dimethylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	Di-n-butylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	Di-n-octylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	Fluoranthene	ug/l	0.21 U	0.5 U	0.21 UJ		0.55 U	0.2 U	0.2 U	22 U	0.051 U	0.054 U	0.1 U				0.015 J	
13	MW13-2	Groundwater	SVOA	Fluorene	ug/l	0.21 U	0.5 U	0.21 UJ		0.11 U	0.1 U	0.1 U	22 U	0.12 U	0.054 U	0.1 U				0.020 U	
13	MW13-2	Groundwater	SVOA	Hexachlorobenzene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U	5 U					
13	MW13-2	Groundwater	SVOA	Hexachlorobutadiene	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	33 U		5.1 U						
13	MW13-2	Groundwater	SVOA	Hexachlorocyclopentadiene	ug/l	2 U	1 U	1 U		6 U	5 U	5 U	33 U		10 U	10 UJ					
13	MW13-2	Groundwater	SVOA	Hexachloroethane	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	HPAH (total)	ug/l	0.27 U	1 U	0.27 U		0.55 U											
13	MW13-2	Groundwater	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.04 U	0.3 U	0.04 U		0.11 U	0.1 U	0.1 U	22 U	0.2 U	0.054 U					0.020 U	
13	MW13-2	Groundwater	SVOA	Isophorone	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	27 U		5.1 U						
13	MW13-2	Groundwater	SVOA	m,p-Cresols	ug/l								22 U								
13	MW13-2	Groundwater	SVOA	LPAH (total)	ug/l	1 U	1 U	0.5 U		2.2 U											
13	MW13-2	Groundwater	SVOA	Naphthalene	ug/l	1 U	1 U	0.5 UJ		2.2 U	1 U	1 U	22 U	0.24 U	0.26 U	0.1 U				0.020 U	
13	MW13-2	Groundwater	SVOA	NCPAH (total)	ug/l	1 U	1 U	1 U		6 U											
13	MW13-2	Groundwater	SVOA	Nitrobenzene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	N-Nitrosodimethylamine	ug/l								22 U								
13	MW13-2	Groundwater	SVOA	N-Nitrosodinpropylamine	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW13-2	Groundwater	SVOA	N-Nitrosodiphenylamine	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		10 U						
13	MW13-2	Groundwater	SVOA	Pentachlorophenol	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	150 U		5.1 U	1 U					
13	MW13-2	Groundwater	SVOA	Phenanthrene	ug/l	0.64 U	0.25 U	0.5 U		0.11 U	0.1 U	0.1 U	22 U	0.051 U	0.054 U					0.020 U	
13	MW13-2	Groundwater	SVOA	Phenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	11 U		5.1 U						
13	MW13-2	Groundwater	SVOA	Pyrene	ug/l	0.27 U	0.1 U	0.27 UJ		0.11 U	0.1 U	0.1 U	22 U	0.051 U	0.054 U	0.1 U				0.015 J	
13	MW13-2	Groundwater	TIN	Aluminum	ug/l	5990 J	3650	418	164 U	410	290	102 J	1120	40.1	109						
13	MW13-2	Groundwater	TIN	Antimony	ug/l	5 U	5 U	5 U	5 U	0.046 U	0.087 U	1.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.056 U	0.10 J		
13	MW13-2	Groundwater	TIN	Arsenic	ug/l	3.6 J	5.4 J	2 U	3.6	0.75 J	3.5	2.9 U	5 U	1.36	3.02	5.07	6.51	7.2	7.44	7.85	11.0
13	MW13-2	Groundwater	TIN	Barium	ug/l	23 J	11.3 J	5.6 J	3.9	5.1 J	3.6 J	4.6 J	5.67	2.96	2.39	12.1	7.72	7.3 J		45.3	36.5
13	MW13-2	Groundwater	TIN	Beryllium	ug/l	1 U	1 U	1 U	0.26 U	0.33 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	1.120		
13	MW13-2	Groundwater	TIN	Cadmium	ug/l	1 U	1 U	1 U	0.057 UJ	0.047 U	0.053 U	0.3 U	2 U	0.2 U	0.2 U	1 U	0.07 J	0.47	0.074 J		
13	MW13-2	Groundwater	TIN	Calcium	ug/l	23700	14200	17200	21000	17300	19800	19400	21000	19500							
13	MW13-2	Groundwater	TIN	Chromium	ug/l	5 U	5 U	5 U	4 UJ	6.4 U	14.9	0.6 J	6 U	0.291	0.546 J	1.68 U	1 U	1.0 U	1.18		
13	MW13-2	Groundwater	TIN	Cobalt	ug/l	5 U	5 U	5 U	4 U	2.9 U	0.18 J	0.5 U	1.15	0.153	0.207						
13	MW13-2	Groundwater	TIN	Copper	ug/l	12.7 J	9.5 J	2.1 J	4 UJ	2.1 U	7.3	1.8 J	6 U	2.22	0.5 U	5.54 J	3.72	3.5	4.48		
13	MW13-2	Groundwater	TIN	Iron	ug/l	3380 J	2000	278	290	262	264	225	1000 U	50 U							
13	MW13-2	Groundwater	TIN	Lead	ug/l	2 U	2 U	1 U	2 U	0.019 U	0.14 J	1.6 U	2 U	0.15 U	0.15 U	0.68 UJ	0.3 J	0.23 J	8.880		
13	MW13-2	Groundwater	TIN	Magnesium	ug/l	25900	10700	15500	32200	15000	14400	13700	14300	15400							
13	MW13-2	Groundwater	TIN	Manganese	ug/l	600	245	49	2.6 J	35.7	25.8	11.2 J	112	12	18.7						
13	MW13-2	Groundwater	TIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U		
13	MW13-2	Groundwater	TIN	Nickel	ug/l	5 U	5 U	5 U	4 U	3.6 U	2.4 J	1.3 J	2 U	0.886	0.914	1.36 J	0.908 J	1.4 J	2.53		
13	MW13-2	Groundwater	TIN	Potassium	ug/l	11400	5900	6470 J	15100	5860	5560	5550 J	6080	4630							
13	MW13-2	Groundwater	TIN	Selenium	ug/l	3 U	3 U	2 U	7.9	0.99 J	1.2 J	1.1 U	5 U	0.538	0.5 U	1 U	2 U	0.71 UJ	5.6 J		
13	MW13-2	Groundwater	TIN	Silver	ug/l	5 U	5 U	5 U	4 U	3 U	0.5 U	0.7 U	2 U	0.35 U	1.18 J	1 U	1 U	0.085 U	0.034		
13	MW13-2	Groundwater	TIN	Sodium	ug/l	185000	67100	71900	307000	69400	55300	58000 J		49600							
13	MW13-2	Groundwater	TIN	Thallium	ug/l	3 UJ	3 U	2 U	10 U	0.008 U	0.012 U	3.5 U	1 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.030		
13	MW13-2	Groundwater	TIN	Vanadium	ug/l	6.4 J	7.6 J	5 U	3 UJ	2 U	2.3 J	0.8 J	20 U	1.03	2.05						
13	MW13-2	Groundwater	TIN	Zinc	ug/l	13.4 J	10.4 J	5 U	20.8 U	5.6	7.4	6.1 J	25 U	8.55	1.2	11.5 U	2.92 J	5.0 U	29.9		
13	MW13-2	Groundwater	VOA	1,1,1,2-Tetrachloroethane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	1,1,1-Trichloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	1,1,2-Trichloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	1,1,2-Trichlorotrifluoroethane	ug/l									2 U	2 U						
13	MW13-2	Groundwater	VOA	1,1-Dichloroethane	ug/l	0.3 J	0.48 J	0.27 J	1 U	0.61 J	1 U	1 U		2 U	2 U	0.33 J		1.0 U		0.42 J	
13	MW13-2	Groundwater	VOA	1,1-Dichloroethene	ug/l	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U		2 U	2 UJ	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	1,1-Dichloropropene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	1,2,3-Trichlorobenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	1,2,3-Trichloropropane	ug/l									2 U	2 U	1 UJ		1.0 U			

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Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-2	Groundwater	VOA	1,2,4-Trichlorobenzene	ug/l					1 U	1 U			2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW13-2	Groundwater	VOA	1,2,4-Trimethylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U			10 U	10 U	5 UJ		1.0 U		2.0 U	
13	MW13-2	Groundwater	VOA	1,2-Dibromoethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U			2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW13-2	Groundwater	VOA	1,2-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	1,2-Dichloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	1,2-Dichloropropane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	1,3,5-Trimethylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	1,3-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	1,3-Dichloropropane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U											
13	MW13-2	Groundwater	VOA	1,4-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	2,2-Dichloropropane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	2-Butanone	ug/l	5 UJ	5 U	5 U		5 U	5 U	5 U		50 U	50 U	10 UJ		5.0 U			
13	MW13-2	Groundwater	VOA	2-Chloroethyl vinyl ether	ug/l									10 U	10 U						
13	MW13-2	Groundwater	VOA	2-Chlorotoluene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	2-Hexanone	ug/l	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U		20 U	20 U	10 UJ		5.0 U			
13	MW13-2	Groundwater	VOA	4-Chlorotoluene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	4-Isopropyltoluene	ug/l									2 U	2 U	2 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	4-Methyl-2-pentanone	ug/l	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U		20 U	20 U	5 UJ		5.0 U			
13	MW13-2	Groundwater	VOA	Acetone	ug/l	5 UJ	5 U	5 U		5 U	5 U	5 U		50 U	50 U	25 UJ		1.3 J		20 UJ	
13	MW13-2	Groundwater	VOA	Acrylonitrile	ug/l									10 U	10 U						
13	MW13-2	Groundwater	VOA	Benzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	Bromobenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Bromochloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U			2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Bromodichloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Bromoform	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Bromomethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		5 U	5 U	5 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	BTEX (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U											
13	MW13-2	Groundwater	VOA	Carbon disulfide	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	10 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	Carbon tetrachloride	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	Chlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	Chloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		5 U	5 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	Chloroform	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Chloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		5 U	5 U	5 UJ		1.0 UJ		0.50 U	
13	MW13-2	Groundwater	VOA	cis-1,2-Dichloroethene	ug/l	1 UJ	0.57 J	1 U	1.5	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	cis-1,3-Dichloropropene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Dibromochloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Dibromomethane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Dichlorodifluoromethane	ug/l							1 U		5 U	5 U	5 UJ		1.0 UJ			
13	MW13-2	Groundwater	VOA	Ethylbenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	Hexachlorobutadiene	ug/l									2 U	2 U	4 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Iodomethane	ug/l									5 U	5 U						
13	MW13-2	Groundwater	VOA	Isopropylbenzene	ug/l									2 U	2 U	2 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	m,p-Xylene	ug/l	0.2 UJ	0.2 U	0.2 U				0.9 J		2 U	2 U	2 UJ		2.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	Methyl Tert-Butyl Ether	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Methylene chloride	ug/l	2 UJ	1 U	1 U	2 U	2 U	2 U	1 U		5 U	0.76 U	5 UJ		1.0 U		0.16 J	
13	MW13-2	Groundwater	VOA	m-Xylene	ug/l					0.4 U											
13	MW13-2	Groundwater	VOA	Naphthalene	ug/l									2 U	2 U	2 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	n-Butylbenzene	ug/l									2 U	2 U	5 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	n-Propylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	o-Xylene	ug/l	0.2 UJ	0.2 U	0.2 U		0.2 U		1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	sec-Butylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Styrene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	tert-Butylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Tetrachloroethene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	Toluene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.3 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		1.1 U	

Table C-2-C
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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-2	Groundwater	VOA	trans-1,2-Dichloroethene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	trans-1,3-Dichloropropene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	trans-1,4-Dichloro-2-butene	ug/l									10 U	10 U						
13	MW13-2	Groundwater	VOA	Trichloroethene	ug/l	0.5 J	1.3	0.23 J	2.4	0.16 J	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	Trichlorofluoromethane	ug/l							1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-2	Groundwater	VOA	Vinyl acetate	ug/l									5 U	5 U						
13	MW13-2	Groundwater	VOA	Vinyl chloride	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 UJ	1 UJ		1.0 U		0.50 U	
13	MW13-2	Groundwater	VOA	Xylenes	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U									1.0 U	
13	MW13-2	Groundwater	VOA	Xylenes (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U										1.0 U	
13	MW13-3	Groundwater	DIN	Aluminum	ug/l	50 U	50 U	69.6 J		140	1080	80.6 U	12.6	18.8	2.43						
13	MW13-3	Groundwater	DIN	Antimony	ug/l	5.9 J	5 U	5 U		0.046 U	1.9 J	1.6 U	0.5 U	0.612	0.48	1 UJ	0.377 J	0.18 UJ	0.34		
13	MW13-3	Groundwater	DIN	Arsenic	ug/l	2 U	2 U	2 U		0.19 U	4.3 J	2.9 J	2.09	1.53	0.929	1 U	0.49 J	0.56 J	0.97	0.60 U	1.16
13	MW13-3	Groundwater	DIN	Barium	ug/l	5 U	5 U	5 U		1.2 J	1.2 J	3.2 J	1.58	3.02	2.86	1.59	1.52	2.6		1.11	3.94
13	MW13-3	Groundwater	DIN	Beryllium	ug/l	1 U	1 U	1 U		0.33 U	2.3	0.6 U	0.5 U	0.15 U	0.15 U	1 U	1 U	0.043 U	0.020 U		
13	MW13-3	Groundwater	DIN	Cadmium	ug/l	1 U	1 U	1 U		0.047 U	6.6	0.3 U	2 U	0.2 U	0.2 U	1 U	0.1 U	0.16	0.020 UJ		
13	MW13-3	Groundwater	DIN	Calcium	ug/l	25200	8170	5860		12900	21500	28300	17500	27500	37000						
13	MW13-3	Groundwater	DIN	Chromium	ug/l	5 U	5 U	5 U		6.4 U	0.6 U	0.5 J	4.44	1.75	5.86	1 U	1 U	1.0 U	0.36 J		
13	MW13-3	Groundwater	DIN	Cobalt	ug/l	5 U	5 U	5 U		2.9 U	4.6 J	0.5 U	0.4 U	0.5 U	3.5						
13	MW13-3	Groundwater	DIN	Copper	ug/l	3.5 J	2.1 J	2 U		2.1 U	5.2	2.8 J	3 U	3.21	5.48	3.03	2.26	3.1	1.96		
13	MW13-3	Groundwater	DIN	Iron	ug/l	219 U	25 J	58.7 J		240	1060	21.4 J	1000 U	50 U	740						
13	MW13-3	Groundwater	DIN	Lead	ug/l	2 U	2 U	1 U		0.019 U	0.12 J	1.6 U	0.3 U	0.1 U	0.301	1 U	1 U	0.075 U	0.030 U		
13	MW13-3	Groundwater	DIN	Magnesium	ug/l	13100	4700	3770		6110	7870	9880	8040	9960	19000						
13	MW13-3	Groundwater	DIN	Manganese	ug/l	300	5.7 J	5.9 J		10.1	7.9 J	3.1 J	13.7	3.89	274						
13	MW13-3	Groundwater	DIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ		0.1 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U		
13	MW13-3	Groundwater	DIN	Nickel	ug/l	5 U	5 U	5 U		3.6 U	1.1 U	0.7 U	1 U	1.08	1.58	0.65 J	0.383 J	1.1 J	0.49		
13	MW13-3	Groundwater	DIN	Potassium	ug/l	6470	4470	4480 J		3920	4640	5320 J	5040	4330	8600						
13	MW13-3	Groundwater	DIN	Selenium	ug/l	3 U	3 U	2 U		0.78 J	4	1.5 J	2.5 U	0.767	1.7	1 U	2 U	1.0 UJ	1.2 J		
13	MW13-3	Groundwater	DIN	Silver	ug/l	5 U	5 U	5 U		3 U	0.5 U	0.7 U	1 U	0.1 U	0.1 U	1 U	1 U	0.085 U	0.030 U		
13	MW13-3	Groundwater	DIN	Sodium	ug/l	58000	56300	56500		45100	44200	42400 J		40300	110000						
13	MW13-3	Groundwater	DIN	Thallium	ug/l	3 UJ	3 U	2 U		0.008 U	0.6 J	3.5 U	0.5 U	0.05 U	0.123	1 U	1 U	0.044 U	0.020 U		
13	MW13-3	Groundwater	DIN	Vanadium	ug/l	5 U	5 U	5 U		2 U	0.9 J	1.3 J	10 U	5 U	5 U						
13	MW13-3	Groundwater	DIN	Zinc	ug/l	5 U	5 U	5 U		6.7 J	3.5 J	5.1 U	17.7	7.4	4.64	2.48 J	1.5 J	2.5 J	1.02 J		
13	MW13-3	Groundwater	P/A	4,4-DDD	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.032 U	0.021 U							
13	MW13-3	Groundwater	P/A	4,4-DDE	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.032 U	0.021 U							
13	MW13-3	Groundwater	P/A	4,4-DDT	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.032 U	0.021 U							
13	MW13-3	Groundwater	P/A	Aldrin	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.0098 U	0.032 U	0.0092 U							
13	MW13-3	Groundwater	P/A	alpha-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.0098 U	0.032 U	0.011 U							
13	MW13-3	Groundwater	P/A	alpha-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.0098 U	0.032 U	0.01 U							
13	MW13-3	Groundwater	P/A	Aroclor 1016	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.105 U	0.52 U							
13	MW13-3	Groundwater	P/A	Aroclor 1221	ug/l	0.4 U	0.4 U	0.4 U		0.4 U	0.4 U	0.39 U	0.105 U	0.52 U							
13	MW13-3	Groundwater	P/A	Aroclor 1232	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.105 U	0.52 U							
13	MW13-3	Groundwater	P/A	Aroclor 1242	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.105 U	0.52 U							
13	MW13-3	Groundwater	P/A	Aroclor 1248	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.105 U	0.52 U							
13	MW13-3	Groundwater	P/A	Aroclor 1254	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.105 U	0.52 U							
13	MW13-3	Groundwater	P/A	Aroclor 1260	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.105 U	0.52 U							
13	MW13-3	Groundwater	P/A	beta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.0098 U	0.032 U	0.013 U							
13	MW13-3	Groundwater	P/A	Chlordane	ug/l									0.01 U							
13	MW13-3	Groundwater	P/A	Chlordane (total)	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01										
13	MW13-3	Groundwater	P/A	DDT (total)	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02										
13	MW13-3	Groundwater	P/A	delta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.0098 U	0.032 U	0.011 U							
13	MW13-3	Groundwater	P/A	Dieldrin	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.032 U	0.021 U							
13	MW13-3	Groundwater	P/A	Endosulfan (total)	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.01										
13	MW13-3	Groundwater	P/A	Endosulfan I	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.0098 U	0.032 U	0.021 U							
13	MW13-3	Groundwater	P/A	Endosulfan II	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.032 U	0.021 U							
13	MW13-3	Groundwater	P/A	Endosulfan sulfate	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.032 U	0.021 U							
13	MW13-3	Groundwater	P/A	Endrin	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.032 U	0.021 U							
13	MW13-3	Groundwater	P/A	Endrin Aldehyde	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.032 U	0.022 U							

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-3	Groundwater	P/A	Endrin ketone	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.032 U								
13	MW13-3	Groundwater	P/A	gamma-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.0098 U	0.032 U	0.01 U							
13	MW13-3	Groundwater	P/A	Heptachlor	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.0098 U	0.032 U	0.019 U							
13	MW13-3	Groundwater	P/A	Heptachlor epoxide	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.0098 U	0.032 U	0.0088 U							
13	MW13-3	Groundwater	P/A	Lindane	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.0098 U	0.032 U	0.01 U							
13	MW13-3	Groundwater	P/A	Methoxychlor	ug/l	0.1 U	0.1 UJ	0.1 UJ		0.1 U	0.1 U	0.098 U	0.032 U	0.052 U							
13	MW13-3	Groundwater	P/A	PCB (Sum Detect + .5 NonDetect)	ug/l	0.4 U	0.4 U	0.4 U		0.4 U	0.2										
13	MW13-3	Groundwater	P/A	Toxaphene	ug/l	1 U	1 U	1 U		1 U	1 U	0.98 U	2.6 U	0.52 U							
13	MW13-3	Groundwater	SVOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				5 U	27 U		5.1 U						
13	MW13-3	Groundwater	SVOA	1,2-Dichlorobenzene	ug/l							5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	1,3-Dichlorobenzene	ug/l							5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	1,4-Dichlorobenzene	ug/l							5 U	22 U								
13	MW13-3	Groundwater	SVOA	2,2-oxybis(1-Chloropropane)	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	2,4,5-Trichlorophenol	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	2,4,6-Trichlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	2,4-Dichlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	2,4-Dimethylphenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		26 U						
13	MW13-3	Groundwater	SVOA	2,4-Dinitrophenol	ug/l	5 U	5 U	5 U		20 U	20 U	10 U	200 U		100 U						
13	MW13-3	Groundwater	SVOA	2,4-Dinitrotoluene	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	2,6-Dinitrotoluene	ug/l	2 U	1 U	2 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	2-Chloronaphthalene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	27 U		10 U						
13	MW13-3	Groundwater	SVOA	2-Chlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	2-Methylnaphthalene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	27 U	0.051 U	0.053 U					0.0080 J	
13	MW13-3	Groundwater	SVOA	2-Methylphenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	2-Nitroaniline	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	22 U		100 U						
13	MW13-3	Groundwater	SVOA	2-Nitrophenol	ug/l	2 U	1 U	2 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	3,3-Dichlorobenzidine	ug/l	5 UJ	1 U	1 UJ		5 U	5 U	5 U	22 U		20 U						
13	MW13-3	Groundwater	SVOA	3-Nitroaniline	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	22 U		51 U						
13	MW13-3	Groundwater	SVOA	4,6-Dinitro-2-methylphenol	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	200 U		26 U						
13	MW13-3	Groundwater	SVOA	4-Bromophenyl-phenylether	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	4-Chloro-3-methylphenol	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	4-Chloroaniline	ug/l	2 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	4-Chlorophenyl methylsulfone	ug/l										20 U						
13	MW13-3	Groundwater	SVOA	4-Chlorophenyl-phenylether	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	4-Methylphenol	ug/l	2 U	1 U	1 U		5 U	5 U	5 U			5.1 U						
13	MW13-3	Groundwater	SVOA	4-Nitroaniline	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	22 U		51 U						
13	MW13-3	Groundwater	SVOA	4-Nitrophenol	ug/l	5 U	5 U	5 UJ		20 U	20 U	5 U	150 U		100 U						
13	MW13-3	Groundwater	SVOA	Acenaphthene	ug/l	1 U	1 U	0.5 U		1 U	1 U	1.1 U	27 U	0.051 U	0.053 U	0.1 U				0.019 U	
13	MW13-3	Groundwater	SVOA	Acenaphthylene	ug/l	1 U	1 U	0.5 U		1 U	2 U	2.1 U	22 U	0.051 U	0.053 U					0.019 U	
13	MW13-3	Groundwater	SVOA	Aniline	ug/l								22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	Anthracene	ug/l	0.66 U	0.1 U	0.5 U		0.1 U	0.1 U	0.11 U	22 U	0.3 U	0.32 U	0.1 U				0.019 U	
13	MW13-3	Groundwater	SVOA	Azobenzene	ug/l								220 U								
13	MW13-3	Groundwater	SVOA	Benzidine	ug/l										200 U						
13	MW13-3	Groundwater	SVOA	Benzo(a)anthracene	ug/l	0.01 U	0.2 U	0.01 U		0.1 U	0.1 U	0.11 U	22 U	0.051 U	0.053 U					0.019 U	
13	MW13-3	Groundwater	SVOA	Benzo(a)pyrene	ug/l	0.02 U	0.25 U	0.02 U		0.1 U	0.1 U	0.11 U	22 U	0.064 U	0.067 U	0.1 U				0.019 U	
13	MW13-3	Groundwater	SVOA	Benzo(b)fluoranthene	ug/l	0.02 U	1 U	0.02 U		0.1 U	0.2 U	0.21 U	22 U	0.051 U	0.053 U	0.1 U				0.019 U	
13	MW13-3	Groundwater	SVOA	Benzo(g,h,i)perylene	ug/l	0.08 U	0.75 U	0.08 UJ		0.1 U	0.2 U	0.21 U	27 U	0.091 U	0.053 U	0.1 U				0.019 U	
13	MW13-3	Groundwater	SVOA	Benzo(k)fluoranthene	ug/l	0.02 U	0.3 U	0.02 UJ		0.1 U	0.1 U	0.11 U	27 U	0.1 U	0.053 U	0.1 U				0.019 U	
13	MW13-3	Groundwater	SVOA	Benzofluoranthenes (total)	ug/l	0.02 U	1 U	0.02 U		0.1 U	0.1										
13	MW13-3	Groundwater	SVOA	Benzoic acid	ug/l								55 U		130 U						
13	MW13-3	Groundwater	SVOA	Benzyl alcohol	ug/l								22 U		10 U						
13	MW13-3	Groundwater	SVOA	bis(2-Chloroethoxy)methane	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	27 U		5.1 U						
13	MW13-3	Groundwater	SVOA	bis(2-Chloroethyl)ether	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	bis(2-Ethylhexyl)adipate												10 U					
13	MW13-3	Groundwater	SVOA	bis(2-Ethylhexyl)phthalate	ug/l	8	1 U	1 U		2 J	5 U	4 J	22 U		5.1 U	0.727 UJ		0.51 U		1.9 U	
13	MW13-3	Groundwater	SVOA	Butylbenzylphthalate	ug/l	11	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	Carbazole	ug/l							5 U									

Table C-2-C
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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-3	Groundwater	SVOA	Chrysene	ug/l	0.15 U	0.2 U	0.15 U		0.052 U	0.1 U	0.11 U	22 U	0.051 U	0.053 U					0.019 U	
13	MW13-3	Groundwater	SVOA	CPAH (total)	ug/l	0.15 U	1 U	0.15 U		0.52 U	0.1										
13	MW13-3	Groundwater	SVOA	Dibenz(a,h)anthracene	ug/l	0.03 U	1 U	0.03 U		0.52 U	0.2 U	0.21 U	27 U	0.15 U	0.053 U					0.019 U	
13	MW13-3	Groundwater	SVOA	Dibenzofuran	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	Diethylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	Dimethylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	Di-n-butylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	Di-n-octylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	Fluoranthene	ug/l	0.21 U	0.5 U	0.21 UJ		0.52 U	0.2 U	0.21 U	22 U	0.051 U	0.053 U	0.1 U				0.019 U	
13	MW13-3	Groundwater	SVOA	Fluorene	ug/l	0.21 U	0.5 U	0.21 UJ		0.1 U	0.1 U	0.11 U	22 U	0.12 U	0.053 U	0.1 U				0.019 U	
13	MW13-3	Groundwater	SVOA	Hexachlorobenzene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U	5 U					
13	MW13-3	Groundwater	SVOA	Hexachlorobutadiene	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	33 U		5.1 U						
13	MW13-3	Groundwater	SVOA	Hexachlorocyclopentadiene	ug/l	2 U	1 U	1 U		5 U	5 U	5 U	33 U		10 U	10 UJ					
13	MW13-3	Groundwater	SVOA	Hexachloroethane	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	HPAH (total)	ug/l	0.27 U	1 U	0.27 U		0.52 U	0.1										
13	MW13-3	Groundwater	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.04 U	0.3 U	0.04 U		0.1 U	0.1 U	0.11 U	22 U	0.2 U	0.053 U					0.019 U	
13	MW13-3	Groundwater	SVOA	Isophorone	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	27 U		5.1 U						
13	MW13-3	Groundwater	SVOA	m,p-Cresols	ug/l								22 U								
13	MW13-3	Groundwater	SVOA	LPAH (total)	ug/l	1 U	1 U	0.5 U		2.1 U	0.1										
13	MW13-3	Groundwater	SVOA	Naphthalene	ug/l	1 U	1 U	0.5 UJ		2.1 U	1 U	1.1 U	22 U	0.24 U	0.26 U	0.1 U				0.019 U	
13	MW13-3	Groundwater	SVOA	NCPAH (total)	ug/l	1 U	1 U	1 U		5 U	0.1										
13	MW13-3	Groundwater	SVOA	Nitrobenzene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	N-Nitrosodimethylamine	ug/l								22 U								
13	MW13-3	Groundwater	SVOA	N-Nitrosodinpropylamine	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.1 U						
13	MW13-3	Groundwater	SVOA	N-Nitrosodiphenylamine	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		10 U						
13	MW13-3	Groundwater	SVOA	Pentachlorophenol	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	150 U		5.1 U	1 U					
13	MW13-3	Groundwater	SVOA	Phenanthrene	ug/l	0.64 U	0.25 U	0.5 U		0.1 U	0.1 U	0.11 U	22 U	0.051 U	0.053 U					0.019 U	
13	MW13-3	Groundwater	SVOA	Phenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	11 U		5.1 U						
13	MW13-3	Groundwater	SVOA	Pyrene	ug/l	0.27 U	0.1 U	0.27 UJ		0.1 U	0.1 U	0.11 U	22 U	0.051 U	0.053 U	0.1 U				0.019 U	
13	MW13-3	Groundwater	TIN	Aluminum	ug/l	50 UJ	724	1130	544	140	695	113 J	1020	133	269						
13	MW13-3	Groundwater	TIN	Antimony	ug/l	5 U	5 U	5 U	5 U	0.046 U	2.1 J	1.6 U	1 U	0.5 U	0.5 U	1 U	0.335 J	0.24 UJ	0.37		
13	MW13-3	Groundwater	TIN	Arsenic	ug/l	2 UJ	2 U	2 U	2 U	0.19 U	1.2 J	2.9 U	5 U	1.51	1.36	1 U	0.54 J	0.75 J	1.27	0.58 U	1.34
13	MW13-3	Groundwater	TIN	Barium	ug/l	5 U	5 U	6.6 J	4	1.2 J	2.5 J	3.7 J	3.87	3.33	3.41	2.55	3.4	4.2 J		1.16	4.30
13	MW13-3	Groundwater	TIN	Beryllium	ug/l	1 U	1 U	1 U	0.26 U	0.33 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U		
13	MW13-3	Groundwater	TIN	Cadmium	ug/l	1 U	1 U	1 U	0.057 UJ	0.047 U	0.71 J	0.3 U	2 U	0.2 U	0.2 U	1 U	0.1 U	0.094 U	0.021 J		
13	MW13-3	Groundwater	TIN	Calcium	ug/l	24900	8730	6300	34200	12900	11300	27100	19900	25400							
13	MW13-3	Groundwater	TIN	Chromium	ug/l	5 U	5 U	5 U	4 UJ	6.4 U	1.1 J	0.5 J	8.55	0.278	0.456	1 U	1 U	1.0 U	0.58 J		
13	MW13-3	Groundwater	TIN	Cobalt	ug/l	5 U	5 U	5 U	4 U	2.9 U	0.12 J	0.5 J	0.8 U	0.1 U	0.212						
13	MW13-3	Groundwater	TIN	Copper	ug/l	2 U	4.6 J	4.5 J	7.2 J	2.1 U	4.9 J	3.1 J	6.13	3.67	3.32	4.1	5.58	3.5	3.87		
13	MW13-3	Groundwater	TIN	Iron	ug/l	546 J	470	696	796	240	390	342	1000 U	77.7							
13	MW13-3	Groundwater	TIN	Lead	ug/l	2 U	2 U	1 U	2 U	0.019 U	0.35 J	1.6 U	2 U	0.201	0.351	1 U	1 U	0.076 J	0.540		
13	MW13-3	Groundwater	TIN	Magnesium	ug/l	12900	5100	3960	19600	6110	5520	9400	9290	9790							
13	MW13-3	Groundwater	TIN	Manganese	ug/l	297	31.2	14.2	244	10.1	17.8	11 J	48.7	11.7	233						
13	MW13-3	Groundwater	TIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ	0.22	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U		
13	MW13-3	Groundwater	TIN	Nickel	ug/l	5 U	5 U	5 U	4 U	3.6 U	1.1 U	2.1 J	7.25	1.06	1.67	1.11 J	0.7 J	1.2 J	0.74		
13	MW13-3	Groundwater	TIN	Potassium	ug/l	6280	4500	4450 J	8900	3920	4190	4990 J	5140	4000							
13	MW13-3	Groundwater	TIN	Selenium	ug/l	3 U	3 U	2 U	3.3	0.67 J	1.6 J	1.1 U	5 U	0.771	1.35	1.01 U	2 U	1.2 UJ	1.7 J		
13	MW13-3	Groundwater	TIN	Silver	ug/l	5 U	5 U	5 U	4 U	3 U	0.5 U	0.7 U	2 U	0.35 U	0.35 U	1 U	1 U	0.085 U	0.030 U		
13	MW13-3	Groundwater	TIN	Sodium	ug/l	56000	57000	55800	133000	45100	44600	40400 J		44100							
13	MW13-3	Groundwater	TIN	Thallium	ug/l	3 UJ	3 UJ	2 U	10 U	0.008 U	0.29 J	3.5 U	1 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U		
13	MW13-3	Groundwater	TIN	Vanadium	ug/l	5 U	5 U	5 U	3 UJ	2 U	1.6 J	1.4 J	20 U	2.14	1.71						
13	MW13-3	Groundwater	TIN	Zinc	ug/l	5 U	7.1 J	7.5 J	26.9 U	6.7	4.9 J	8.3 J	25 U	6.2	4.76	1.96 J	3.56 J	5.0 U	4.30		
13	MW13-3	Groundwater	VOA	1,1,1,2-Tetrachloroethane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	1,1,1-Trichloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	1,1,2-Trichloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	1,1,2-Trichlorotrifluoroethane	ug/l									2 U	2 U						

Table C-2-C
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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-3	Groundwater	VOA	1,1-Dichloroethane	ug/l	0.44 J	1 U	1 U	1.7	0.13 J	1 U	1 U		2 U	2 U	0.52 J		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	1,1-Dichloroethene	ug/l	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	1,1-Dichloropropene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	1,2,3-Trichlorobenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	1,2,3-Trichloropropane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	1,2,4-Trichlorobenzene	ug/l					1 U	1 U			2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW13-3	Groundwater	VOA	1,2,4-Trimethylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U			10 U	10 U	5 UJ		1.0 U		2.0 U	
13	MW13-3	Groundwater	VOA	1,2-Dibromoethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U			2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW13-3	Groundwater	VOA	1,2-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	1,2-Dichloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	1,2-Dichloropropane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	1,3,5-Trimethylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	1,3-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U			2 U	2 U	0.25 J		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	1,3-Dichloropropane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1										
13	MW13-3	Groundwater	VOA	1,4-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U			2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	2,2-Dichloropropane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	2-Butanone	ug/l	5 UJ	5 U	5 U		5 U	5 U	5 U		50 U	50 U	10 UJ		5.0 U			
13	MW13-3	Groundwater	VOA	2-Chloroethyl vinyl ether	ug/l									10 U	10 U						
13	MW13-3	Groundwater	VOA	2-Chlorotoluene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	2-Hexanone	ug/l	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U		20 U	20 U	10 UJ		5.0 U			
13	MW13-3	Groundwater	VOA	4-Chlorotoluene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	4-Isopropyltoluene	ug/l									2 U	2 U	2 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	4-Methyl-2-pentanone	ug/l	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U		20 U	20 U	5 UJ		5.0 U			
13	MW13-3	Groundwater	VOA	Acetone	ug/l	5 UJ	5 U	5 U		5 U	5 U	5 U		50 U	3.2 J	25 UJ		3.6 J		20 UJ	
13	MW13-3	Groundwater	VOA	Acrylonitrile	ug/l									10 U	10 U						
13	MW13-3	Groundwater	VOA	Benzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	Bromobenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Bromochloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U			2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Bromodichloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Bromoform	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Bromomethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		5 U	5 U	5 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	BTEX (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1										
13	MW13-3	Groundwater	VOA	Carbon disulfide	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	10 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	Carbon tetrachloride	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	Chlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	Chloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		5 U	5 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	Chloroform	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Chloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		5 U	5 U	5 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	cis-1,2-Dichloroethene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	cis-1,3-Dichloropropene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Dibromochloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Dibromomethane	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Dichlorodifluoromethane	ug/l							1 U		5 U	5 U	5 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Ethylbenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	Hexachlorobutadiene	ug/l									2 U	2 U	4 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Iodomethane	ug/l									5 U	5 U						
13	MW13-3	Groundwater	VOA	Isopropylbenzene	ug/l									2 U	2 U	2 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	m,p-Xylene	ug/l	0.2 UJ	0.2 U	0.2 U				1 U		2 U	0.42 J	2 UJ		2.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	Methyl Tert-Butyl Ether	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Methylene chloride	ug/l	2 UJ	1 U	1 U	2 U	2 U	2 U	1 U		5 U	5 UJ	5 UJ		1.0 U		2.0 U	
13	MW13-3	Groundwater	VOA	m-Xylene	ug/l					0.4 U											
13	MW13-3	Groundwater	VOA	Naphthalene	ug/l									2 U	38	2 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	n-Butylbenzene	ug/l									2 U	2 U	5 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	n-Propylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	o-Xylene	ug/l	0.2 UJ	0.2 U	0.2 U		0.2 U		1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	

Table C-2-C
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						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-3	Groundwater	VOA	sec-Butylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Styrene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	tert-Butylbenzene	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Tetrachloroethene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	Toluene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.3 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		1.2 U	
13	MW13-3	Groundwater	VOA	trans-1,2-Dichloroethene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	trans-1,3-Dichloropropene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	trans-1,4-Dichloro-2-butene	ug/l									10 U	10 U						
13	MW13-3	Groundwater	VOA	Trichloroethene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	Trichlorofluoromethane	ug/l							1 U		2 U	2 U	1 UJ		1.0 U			
13	MW13-3	Groundwater	VOA	Vinyl acetate	ug/l									5 U	5 U						
13	MW13-3	Groundwater	VOA	Vinyl chloride	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U		2 U	2 UJ	1 UJ		1.0 U		0.50 U	
13	MW13-3	Groundwater	VOA	Xylenes	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U									1.0 U	
13	MW13-3	Groundwater	VOA	Xylenes (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1									1.0 U	
13	MW13-4	Groundwater	DIN	Aluminum	ug/l	50 U	50 U	50 U		51.4 J	43 U		8.79	1.75	1.87						
13	MW13-4	Groundwater	DIN	Antimony	ug/l	8.3 J	5 U	5 U		0.31 J	0.76 J		0.835	0.872	2.93	1.67 UJ	4.02		1.48		
13	MW13-4	Groundwater	DIN	Arsenic	ug/l	2 U	2 U	2 U		0.19 U	0.81 J		2 U	1.06	3.07	1.07 UJ	0.54 J	1.7	3.72	1.23	1.42
13	MW13-4	Groundwater	DIN	Barium	ug/l	5.3 J	5 U	5.2 J		1.9 J	2.1 J		2.42	1.73	6.04	2.26	2.8	4.2 J		1.97	2.95
13	MW13-4	Groundwater	DIN	Beryllium	ug/l	1 U	1 U	1 U		0.33 U	0.28 U		0.5 U	0.15 U	0.15 U	1 U	1 U	0.043 U	0.020 U		
13	MW13-4	Groundwater	DIN	Cadmium	ug/l	1 U	1 U	1 U		0.047 U	5.2		2 U	0.2 U	0.2 U	1 U	0.04 J	0.33 J	0.054		
13	MW13-4	Groundwater	DIN	Calcium	ug/l	22600	12800	15600		6480	14800		13500	14500	60000						
13	MW13-4	Groundwater	DIN	Chromium	ug/l	5 U	5 U	5 U		6.4 U	0.6 U		9.99	2.92	6.5	1.05 UJ	1 U	1.0 U	0.83 J		
13	MW13-4	Groundwater	DIN	Cobalt	ug/l	5 U	5 U	5 U		2.9 U	0.11 J		0.4 U	0.5 U	3.92						
13	MW13-4	Groundwater	DIN	Copper	ug/l	4.7 J	3.9 J	3.7 J		2.1 U	4.4 J		3.3	2.85	5.18	3.44	3.21	8.1 J	3.09		
13	MW13-4	Groundwater	DIN	Iron	ug/l	20 U	20 U	20 U		164	15 J		1000 U	50 U	50 U						
13	MW13-4	Groundwater	DIN	Lead	ug/l	2 U	2 U	1 U		0.019 U	0.078 J		0.3 U	0.1 U	0.251	1 U	1 U	0.078 J	0.030 U		
13	MW13-4	Groundwater	DIN	Magnesium	ug/l	29200	16700	20800		8700	18000		14900	17000	58000						
13	MW13-4	Groundwater	DIN	Manganese	ug/l	3.8 J	2 U	2 U		2.6 J	0.7 J		10 U	0.219	6.04						
13	MW13-4	Groundwater	DIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ		0.1 U	0.2 U		0.2 U		0.2 U	0.2 U	0.2 U	0.129 J	0.20 U		
13	MW13-4	Groundwater	DIN	Nickel	ug/l	5 U	5 U	5 U		3.6 U	1.1 U		1 U	0.641	2.61	0.54 UJ	0.725 J	0.99 J	0.78		
13	MW13-4	Groundwater	DIN	Potassium	ug/l	15600	12200	21800 J		8900	12000		11100	11400	24000						
13	MW13-4	Groundwater	DIN	Selenium	ug/l	3 U	3 U	2 U		2 J	2.1 J		2.5 U	1.41	10.2	2.77	2 U	4.9 J	10.3 J		
13	MW13-4	Groundwater	DIN	Silver	ug/l	5 U	5 U	5 U		3 U	0.5 U		1 U	0.1 U	0.1 U	1 U	1 U	0.085 U	0.030 U		
13	MW13-4	Groundwater	DIN	Sodium	ug/l	223000	146000	260000		145000	135000			150000	440000						
13	MW13-4	Groundwater	DIN	Thallium	ug/l	3 UJ	3 UJ	2 U		0.008 U	0.15 J		0.5 U	0.05 U	0.13	1 U	1 U	0.044 U	0.020 U		
13	MW13-4	Groundwater	DIN	Vanadium	ug/l	5 U	5 U	5 U		2 U	2.7 J		10 U	5 U	7.07						
13	MW13-4	Groundwater	DIN	Zinc	ug/l	5 U	11.3 J	5 U		10.5 J	4.1 J		10 U	8.97	10.4	5.73	4.5 J	9.1 J	5.32		
13	MW13-4	Groundwater	P/A	4,4-DDD	ug/l		0.02 U	0.02 U		0.0204 U	0.02 U		0.034 U	0.02 U							
13	MW13-4	Groundwater	P/A	4,4-DDE	ug/l		0.02 U	0.02 U		0.0204 U	0.02 U		0.034 U	0.02 U							
13	MW13-4	Groundwater	P/A	4,4-DDT	ug/l		0.02 U	0.02 U		0.0204 U	0.02 U		0.034 U	0.02 U							
13	MW13-4	Groundwater	P/A	Aldrin	ug/l		0.01 U	0.01 U		0.0102 U	0.01 U		0.034 U	0.009 U							
13	MW13-4	Groundwater	P/A	alpha-BHC	ug/l		0.01 U	0.01 U		0.0102 U	0.01 U		0.034 U	0.011 U							
13	MW13-4	Groundwater	P/A	alpha-Chlordane	ug/l		0.01 U	0.01 U		0.0102 U	0.01 U		0.034 U	0.01 U							
13	MW13-4	Groundwater	P/A	Aroclor 1016	ug/l		0.2 U	0.2 U		0.204 U	0.2 U		0.114 U	0.51 U							
13	MW13-4	Groundwater	P/A	Aroclor 1221	ug/l		0.4 U	0.4 U		0.408 U	0.4 U		0.114 U	0.51 U							
13	MW13-4	Groundwater	P/A	Aroclor 1232	ug/l		0.2 U	0.2 U		0.204 U	0.2 U		0.114 U	0.51 U							
13	MW13-4	Groundwater	P/A	Aroclor 1242	ug/l		0.2 U	0.2 U		0.204 U	0.2 U		0.114 U	0.51 U							
13	MW13-4	Groundwater	P/A	Aroclor 1248	ug/l		0.2 U	0.2 U		0.204 U	0.2 U		0.114 U	0.51 U							
13	MW13-4	Groundwater	P/A	Aroclor 1254	ug/l		0.2 U	0.2 U		0.204 U	0.2 U		0.114 U	0.51 U							
13	MW13-4	Groundwater	P/A	Aroclor 1260	ug/l		0.2 U	0.2 U		0.204 U	0.2 U		0.114 U	0.51 U							
13	MW13-4	Groundwater	P/A	beta-BHC	ug/l		0.01 U	0.01 U		0.0102 U	0.01 U		0.034 U	0.012 U							
13	MW13-4	Groundwater	P/A	Chlordane	ug/l									0.01 U							
13	MW13-4	Groundwater	P/A	Chlordane (total)	ug/l		0.01 U	0.01 U		0.0102 U											
13	MW13-4	Groundwater	P/A	DDT (total)	ug/l		0.02 U	0.02 U		0.0204 U											
13	MW13-4	Groundwater	P/A	delta-BHC	ug/l		0.01 U	0.01 U		0.0102 U	0.01 U		0.034 U	0.01 U							
13	MW13-4	Groundwater	P/A	Dieldrin	ug/l		0.02 U	0.02 U		0.0204 U	0.02 U		0.034 U	0.02 U							
13	MW13-4	Groundwater	P/A	Endosulfan (total)	ug/l		0.02 U	0.02 U		0.0204 U											

Table C-2-C
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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-4	Groundwater	P/A	Endosulfan I	ug/l		0.01 U	0.01 U		0.0102 U	0.01 U		0.034 U	0.02 U							
13	MW13-4	Groundwater	P/A	Endosulfan II	ug/l		0.02 U	0.02 U		0.0204 U	0.02 U		0.034 U	0.02 U							
13	MW13-4	Groundwater	P/A	Endosulfan sulfate	ug/l		0.02 U	0.02 U		0.0204 U	0.02 U		0.034 U	0.02 U							
13	MW13-4	Groundwater	P/A	Endrin	ug/l		0.02 U	0.02 U		0.0204 U	0.02 U		0.034 U	0.02 U							
13	MW13-4	Groundwater	P/A	Endrin Aldehyde	ug/l		0.02 U	0.02 U		0.0204 U	0.02 U		0.034 U	0.021 U							
13	MW13-4	Groundwater	P/A	Endrin ketone	ug/l		0.02 U	0.02 U		0.0204 U	0.02 U		0.034 U								
13	MW13-4	Groundwater	P/A	gamma-Chlordane	ug/l		0.01 U	0.01 U		0.0102 U	0.01 U		0.034 U	0.01 U							
13	MW13-4	Groundwater	P/A	Heptachlor	ug/l		0.01 U	0.01 U		0.0102 U	0.01 U		0.034 U	0.019 U							
13	MW13-4	Groundwater	P/A	Heptachlor epoxide	ug/l		0.01 U	0.01 U		0.0102 U	0.01 U		0.034 U	0.0086 U							
13	MW13-4	Groundwater	P/A	Lindane	ug/l		0.01 U	0.01 U		0.0102 U	0.01 U		0.034 U	0.01 U							
13	MW13-4	Groundwater	P/A	Methoxychlor	ug/l		0.1 UJ	0.1 UJ		0.102 U	0.1 U		0.034 U	0.051 U							
13	MW13-4	Groundwater	P/A	PCB (Sum Detect + .5 NonDetect)	ug/l		0.4 U	0.4 U		0.408 U											
13	MW13-4	Groundwater	P/A	Toxaphene	ug/l		1 U	1 U		1.02 U	1 U		2.8 U	0.51 U							
13	MW13-4	Groundwater	SVOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U					30 U		5.1 U						
13	MW13-4	Groundwater	SVOA	1,2-Dichlorobenzene	ug/l								24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	1,3-Dichlorobenzene	ug/l								24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	1,4-Dichlorobenzene	ug/l								24 U								
13	MW13-4	Groundwater	SVOA	2,2-oxybis(1-Chloropropane)	ug/l	1 U	1 U	1 UJ		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	2,4,5-Trichlorophenol	ug/l	5 U	5 U	5 U		22 U	20 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	2,4,6-Trichlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	2,4-Dichlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	2,4-Dimethylphenol	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		26 U						
13	MW13-4	Groundwater	SVOA	2,4-Dinitrophenol	ug/l	5 U	5 U	5 U		22 U	20 U		210 U		100 U						
13	MW13-4	Groundwater	SVOA	2,4-Dinitrotoluene	ug/l	1 U	1 U	2 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	2,6-Dinitrotoluene	ug/l	2 U	1 U	2 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	2-Chloronaphthalene	ug/l	1 U	1 U	1 U		6 U	5 U		30 U		10 U						
13	MW13-4	Groundwater	SVOA	2-Chlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	2-Methylnaphthalene	ug/l	1 U	1 U	1 UJ		6 U	5 U		30 U	0.051 U	0.057 U					0.0069 J	
13	MW13-4	Groundwater	SVOA	2-Methylphenol	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	2-Nitroaniline	ug/l	5 U	5 U	5 UJ		22 U	20 U		24 U		100 U						
13	MW13-4	Groundwater	SVOA	2-Nitrophenol	ug/l	2 U	1 U	2 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	3,3-Dichlorobenzidine	ug/l	5 UJ	1 U	1 U		6 U	5 U		24 U		20 U						
13	MW13-4	Groundwater	SVOA	3-Nitroaniline	ug/l	5 U	5 U	5 U		22 U	20 U		24 U		51 U						
13	MW13-4	Groundwater	SVOA	4,6-Dinitro-2-methylphenol	ug/l	5 U	5 U	5 U		22 U	20 U		210 U		26 U						
13	MW13-4	Groundwater	SVOA	4-Bromophenyl-phenylether	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	4-Chloro-3-methylphenol	ug/l	1 U	1 U	2 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	4-Chloroaniline	ug/l	2 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	4-Chlorophenyl methylsulfone	ug/l										20 U						
13	MW13-4	Groundwater	SVOA	4-Chlorophenyl-phenylether	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	4-Methylphenol	ug/l	2 U	1 U	1 U		6 U	5 U				5.1 U						
13	MW13-4	Groundwater	SVOA	4-Nitroaniline	ug/l	5 U	5 U	5 U		22 U	20 U		24 U		51 U						
13	MW13-4	Groundwater	SVOA	4-Nitrophenol	ug/l	5 U	5 U	5 U		22 U	20 U		170 U		100 U						
13	MW13-4	Groundwater	SVOA	Acenaphthene	ug/l	1 U	1 U	0.5 U		1 U	1 U		30 U	0.051 U	0.057 U	0.1 U				0.021 U	
13	MW13-4	Groundwater	SVOA	Acenaphthylene	ug/l	1 U	1 U	0.5 U		1 U	2 U		24 U	0.051 U	0.057 U					0.021 U	
13	MW13-4	Groundwater	SVOA	Aniline	ug/l								24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	Anthracene	ug/l	0.66 U	0.1 U	0.5 U		0.1 U	0.1 U		24 U	0.31 U	0.34 U	0.1 U				0.0036 J	
13	MW13-4	Groundwater	SVOA	Azobenzene	ug/l								240 U								
13	MW13-4	Groundwater	SVOA	Benzidine	ug/l										200 U						
13	MW13-4	Groundwater	SVOA	Benzo(a)anthracene	ug/l	0.01 U	0.2 U	0.01 U		0.1 U	0.1 U		24 U	0.051 U	0.057 U					0.021 U	
13	MW13-4	Groundwater	SVOA	Benzo(a)pyrene	ug/l	0.02 U	0.25 U	0.02 U		0.1 U	0.1 U		24 U	0.064 U	0.072 U	0.1 U				0.021 U	
13	MW13-4	Groundwater	SVOA	Benzo(b)fluoranthene	ug/l	0.02 U	1 U	0.02 U		0.1 U	0.2 U		24 U	0.051 U	0.057 U	0.1 U				0.021 U	
13	MW13-4	Groundwater	SVOA	Benzo(g,h,i)perylene	ug/l	0.08 U	0.75 U	0.08 UJ		0.1 U	0.2 U		30 U	0.092 U	0.057 U	0.1 U				0.021 U	
13	MW13-4	Groundwater	SVOA	Benzo(k)fluoranthene	ug/l	0.02 U	0.3 U	0.02 UJ		0.1 U	0.1 U		30 U	0.1 U	0.057 U	0.1 U				0.021 U	
13	MW13-4	Groundwater	SVOA	Benzofluoranthenes (total)	ug/l	0.02 U	1 U	0.02 U		0.1 U											
13	MW13-4	Groundwater	SVOA	Benzoic acid	ug/l								60 U		130 U						
13	MW13-4	Groundwater	SVOA	Benzyl alcohol	ug/l								24 U		10 U						
13	MW13-4	Groundwater	SVOA	bis(2-Chloroethoxy)methane	ug/l	1 U	1 U	1 U		6 U	5 U		30 U		5.1 U						

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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-4	Groundwater	SVOA	bis(2-Chloroethyl)ether	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	bis(2-Ethylhexyl)adipate												10 U					
13	MW13-4	Groundwater	SVOA	bis(2-Ethylhexyl)phthalate	ug/l	3	1 U	6		6 U	5 U		24 U		5.1 U	0.818 UJ		0.48 U		2.0 U	
13	MW13-4	Groundwater	SVOA	Butylbenzylphthalate	ug/l	1 U	1 U	1 UJ		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	Chrysene	ug/l	0.15 U	0.2 U	0.15 U		0.05 U	0.1 U		24 U	0.051 U	0.057 U					0.021 U	
13	MW13-4	Groundwater	SVOA	CPAH (total)	ug/l	0.15 U	1 U	0.15 U		0.5 U											
13	MW13-4	Groundwater	SVOA	Dibenz(a,h)anthracene	ug/l	0.03 U	1 U	0.03 U		0.5 U	0.2 U		30 U	0.15 U	0.057 U					0.021 U	
13	MW13-4	Groundwater	SVOA	Dibenzofuran	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	Diethylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	Dimethylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	Di-n-butylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	Di-n-octylphthalate	ug/l	1 U	1 U	1 UJ		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	Fluoranthene	ug/l	0.21 U	0.5 U	0.21 UJ		0.5 U	0.2 U		24 U	0.051 U	0.057 U	0.1 U				0.021 U	
13	MW13-4	Groundwater	SVOA	Fluorene	ug/l	0.21 U	0.5 U	0.21 UJ		0.1 U	0.1 U		24 U	0.12 U	0.057 U	0.1 U				0.021 U	
13	MW13-4	Groundwater	SVOA	Hexachlorobenzene	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U	5 U					
13	MW13-4	Groundwater	SVOA	Hexachlorobutadiene	ug/l	1 U	1 U	2 U		6 U	5 U		36 U		5.1 U						
13	MW13-4	Groundwater	SVOA	Hexachlorocyclopentadiene	ug/l	2 U	1 U	1 U		6 U	5 U		36 U		10 UJ	10 UJ					
13	MW13-4	Groundwater	SVOA	Hexachloroethane	ug/l	1 U	1 U	2 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	HPAH (total)	ug/l	0.27 U	1 U	0.27 U		0.5 U											
13	MW13-4	Groundwater	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.04 U	0.3 U	0.04 U		0.1 U	0.1 U		24 U	0.2 U	0.057 U					0.021 U	
13	MW13-4	Groundwater	SVOA	Isophorone	ug/l	1 U	1 U	1 U		6 U	5 U		30 U		5.1 U						
13	MW13-4	Groundwater	SVOA	LPAH (total)	ug/l	1 U	1 U	0.5 U		2 U											
13	MW13-4	Groundwater	SVOA	m,p-Cresols	ug/l								24 U								
13	MW13-4	Groundwater	SVOA	Naphthalene	ug/l	1 U	1 U	0.5 UJ		2 U	1 U		24 U	0.24 U	0.27 U	0.1 U				0.021 U	
13	MW13-4	Groundwater	SVOA	NCPAH (total)	ug/l	1 U	1 U	1 U		6 U											
13	MW13-4	Groundwater	SVOA	Nitrobenzene	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	N-Nitrosodimethylamine	ug/l								24 U								
13	MW13-4	Groundwater	SVOA	N-Nitrosodinpropylamine	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		5.1 U						
13	MW13-4	Groundwater	SVOA	N-Nitrosodiphenylamine	ug/l	1 U	1 U	1 U		6 U	5 U		24 U		10 U						
13	MW13-4	Groundwater	SVOA	Pentachlorophenol	ug/l	5 U	5 U	5 U		22 U	20 U		170 U		5.1 U	1 U					
13	MW13-4	Groundwater	SVOA	Phenanthrene	ug/l	0.64 U	0.25 U	0.5 U		0.1 U	0.1 U		24 U	0.051 U	0.057 U					0.021 U	
13	MW13-4	Groundwater	SVOA	Phenol	ug/l	1 U	1 U	1 U		6 U	5 U		12 U		5.1 U						
13	MW13-4	Groundwater	SVOA	Pyrene	ug/l	0.27 U	0.1 U	0.27 UJ		0.1 U	0.1 U		24 U	0.051 U	0.057 U	0.1 U				0.021 U	
13	MW13-4	Groundwater	TIN	Aluminum	ug/l	98.5 UJ	95 J	68.2 J	28 U	51.4 J	1060		54.7	27.5	12						
13	MW13-4	Groundwater	TIN	Antimony	ug/l	5 U	5 U	5 U	5 U	0.33 J	1 J		1.42	0.893	2.9	1.49	4.08		1.52		
13	MW13-4	Groundwater	TIN	Arsenic	ug/l	2 UJ	2 U	2 U	3.5	0.19 U	1.3 J		5 U	1.42	3.79	1.23	0.57 J	2.0	5.93	1.47	1.82
13	MW13-4	Groundwater	TIN	Barium	ug/l	5 U	5 U	5 U	8.7	1.9 J	4.8 J		3 U	1.8	6.43	2.31	3.19	4.2 J		2.72	4.16
13	MW13-4	Groundwater	TIN	Beryllium	ug/l	1 U	1 U	1 U	0.26 U	0.33 U	21.2		1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U		
13	MW13-4	Groundwater	TIN	Cadmium	ug/l	1 U	1 U	1 U	0.057 UJ	0.047 U	0.73 J		2 U	0.2 U	0.2 U	1 U	0.05 J	0.094 U	0.063		
13	MW13-4	Groundwater	TIN	Calcium	ug/l	22800	12700	15500	60500	6480	16400		13800	14000							
13	MW13-4	Groundwater	TIN	Chromium	ug/l	5 U	5 U	5 U	4.4 J	6.4 U	0.7 J		6 U	0.265	0.738	1 U	1 U	1.0 U	0.95 J		
13	MW13-4	Groundwater	TIN	Cobalt	ug/l	5 U	5 U	5 U	4 U	2.9 U	0.043 U		0.8 U	0.1 U	0.133						
13	MW13-4	Groundwater	TIN	Copper	ug/l	2.3 J	3.8 J	3.6 J	6.1 J	2.1 U	3.8 J		6 U	3.13	3.51	3.68	3.76	7.8	3.07		
13	MW13-4	Groundwater	TIN	Iron	ug/l	73.8 UJ	47.4 J	63.8 J	100 U	164	632		1000 U	50 U							
13	MW13-4	Groundwater	TIN	Lead	ug/l	2 U	2 U	1 U	2 U	0.019 U	0.15 J		2 U	0.307	0.595	1 U	0.23 J	0.12 J	0.084		
13	MW13-4	Groundwater	TIN	Magnesium	ug/l	29400	16900	20500	72800	8700	16000		15500	17600							
13	MW13-4	Groundwater	TIN	Manganese	ug/l	12.6 J	4.6 J	4.8 J	1 UJ	2.6 J	4.8 J		4 U	2.88	3.77						
13	MW13-4	Groundwater	TIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ	0.14	0.1 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U		
13	MW13-4	Groundwater	TIN	Nickel	ug/l	5 U	5 U	5 U	4 U	3.6 U	1.1 U		2 U	0.671	2.63	0.96 J	0.81 J	1.0 J	0.71		
13	MW13-4	Groundwater	TIN	Potassium	ug/l	15600	12100	21300 J	26600	8900	10700		11300	11700							
13	MW13-4	Groundwater	TIN	Selenium	ug/l	3 U	3 U	2.1 J	13.3	2.3 J	4		5 U	1.79	13.4	3.6	2 U	5.8	12.1 J		
13	MW13-4	Groundwater	TIN	Silver	ug/l	5 U	5 U	5 U	4 U	3 U	0.5 U		2 U	0.35 U	0.77	1 U	1 U	0.085 U	0.030 U		
13	MW13-4	Groundwater	TIN	Sodium	ug/l	225000	145000	260000	474000	145000	94600			159000							
13	MW13-4	Groundwater	TIN	Thallium	ug/l	3 UJ	3 UJ	2 U	10 U	0.008 U	0.16 J		1 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U		
13	MW13-4	Groundwater	TIN	Vanadium	ug/l	5 U	5 U	5 U	3 UJ	2 U	2.7 J		20 U	3.44	6.82						
13	MW13-4	Groundwater	TIN	Zinc	ug/l	5.1 J	7.2 J	5 U	31 U	10.5	4.4 J		25 U	12.2	9.76	5.1	6.25 J	6.3	5.82		
13	MW13-4	Groundwater	VOA	1,1,1,2-Tetrachloroethane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-4	Groundwater	VOA	1,1,1-Trichloroethane	ug/l	0.26 J	0.2 J	0.24 J	1 U	0.24 J	1 U		1 U	2 U	2 U	0.17 J		1.0 U		0.15 J	
13	MW13-4	Groundwater	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		2 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	1,1,2-Trichloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	1,1,2-Trichlorotrifluoroethane	ug/l									2 U	2 U						
13	MW13-4	Groundwater	VOA	1,1-Dichloroethane	ug/l	2.4 J	2.2	2.3 J	1	3.1	4.2		3.18	2.3	2 U	2.82 J		1.8		2.2	
13	MW13-4	Groundwater	VOA	1,1-Dichloroethene	ug/l	1 UJ	1 UJ	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	1,1-Dichloropropene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	1,2,3-Trichlorobenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	1,2,3-Trichloropropane	ug/l								2 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	1,2,4-Trichlorobenzene	ug/l					1 U	1 U		2 U	2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW13-4	Groundwater	VOA	1,2,4-Trimethylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		2.5 U	10 U	10 U	5 UJ		1.0 U		2.0 U	
13	MW13-4	Groundwater	VOA	1,2-Dibromoethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW13-4	Groundwater	VOA	1,2-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	1,2-Dichloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		2 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	1,2-Dichloropropane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		2 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	1,3,5-Trimethylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	1,3-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	1,3-Dichloropropane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U											
13	MW13-4	Groundwater	VOA	1,4-Dichlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	2,2-Dichloropropane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	2-Butanone	ug/l	5 UJ	5 U	5 U		5 U	5 U		50 U	50 U	50 U	10 UJ		5.0 U			
13	MW13-4	Groundwater	VOA	2-Chloroethyl vinyl ether	ug/l								10 U	10 U	10 U						
13	MW13-4	Groundwater	VOA	2-Chlorotoluene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	2-Hexanone	ug/l	5 UJ	5 U	5 U	5 U	5 U	5 U		10 U	20 U	20 U	10 UJ		5.0 U			
13	MW13-4	Groundwater	VOA	4-Chlorotoluene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	4-Isopropyltoluene	ug/l								1 U	2 U	2 U	2 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	4-Methyl-2-pentanone	ug/l	5 UJ	5 U	5 U	5 U	5 U	5 U		10 U	20 U	20 U	5 UJ		5.0 U			
13	MW13-4	Groundwater	VOA	Acetone	ug/l	5 UJ	5 U	5 U		5 U	5 U			50 U	50 U	25 UJ		5.0 U		20UJ	
13	MW13-4	Groundwater	VOA	Acrylonitrile	ug/l									10 U	10 U						
13	MW13-4	Groundwater	VOA	Benzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	1 U		0.5 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	Bromobenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Bromochloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Bromodichloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Bromoform	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Bromomethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		2 U	5 U	5 U	5 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	BTEX (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U											
13	MW13-4	Groundwater	VOA	Carbon disulfide	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		10 U	2 U	2 U	10 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	Carbon tetrachloride	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	Chlorobenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	Chloroethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	5 U	5 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	Chloroform	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Chloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	5 U	5 U	5 UJ		1.0 UJ		0.50 U	
13	MW13-4	Groundwater	VOA	cis-1,2-Dichloroethene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	0.23 J		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	cis-1,3-Dichloropropene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Dibromochloromethane	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Dibromomethane	ug/l								2 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Dichlorodifluoromethane	ug/l								1 U	5 U	5 U	5 UJ		1.0 UJ			
13	MW13-4	Groundwater	VOA	Ethylbenzene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	Hexachlorobutadiene	ug/l								2 U	2 U	2 U	4 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Iodomethane	ug/l									5 U	5 U						
13	MW13-4	Groundwater	VOA	Isopropylbenzene	ug/l								1 U	2 U	2 U	2 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	m,p-Xylene	ug/l	0.2 UJ	0.2 U	0.2 U						2 U	2 U	2 UJ		2.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	Methyl Tert-Butyl Ether	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Methylene chloride	ug/l	2 UJ	1 U	1 U	2 U	2 U	2 U		5 U	5 U	5 UJ	5 UJ		1.0 U		2.0 U	
13	MW13-4	Groundwater	VOA	m-Xylene	ug/l					0.4 U											

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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-4	Groundwater	VOA	Naphthalene	ug/l								2 U	2 U	2 U	2 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	n-Butylbenzene	ug/l								1 U	2 U	2 U	5 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	n-Propylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	o-Xylene	ug/l	0.2 UJ	0.2 U	0.2 U		0.2 U				2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	sec-Butylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Styrene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	tert-Butylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Tetrachloroethene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	Toluene	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	0.3 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	trans-1,2-Dichloroethene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	trans-1,3-Dichloropropene	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	trans-1,4-Dichloro-2-butene	ug/l									10 U	10 U						
13	MW13-4	Groundwater	VOA	Trichloroethene	ug/l	1 UJ	0.4 J	0.2 J	1 U	0.2 J	1 U		1 U	2 U	2 U	0.25 J		1.0 U		0.20 J	
13	MW13-4	Groundwater	VOA	Trichlorofluoromethane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-4	Groundwater	VOA	Vinyl acetate	ug/l									5 U	5 U						
13	MW13-4	Groundwater	VOA	Vinyl chloride	ug/l	1 UJ	1 U	1 U	1 U	1 U	1 U		2 U	2 U	2 UJ	1 UJ		1.0 U		0.50 U	
13	MW13-4	Groundwater	VOA	Xylenes	ug/l	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U		2 U							1.0 U	
13	MW13-4	Groundwater	VOA	Xylenes (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U										1.0 U	
13	MW13-5	Groundwater	DIN	Aluminum	ug/l	50 U	50 U	50 U		27 U	1300	238	3.71	3.85	3.74						
13	MW13-5	Groundwater	DIN	Antimony	ug/l	7.8 J	5 U	5 U		1.2 J	3.8 J	2 J	1.27	1.82	1.94	1.77 UJ	1.8		1.78		
13	MW13-5	Groundwater	DIN	Arsenic	ug/l	2.1 J	2 U	2 U		0.38 J	0.87 J	2.9 U	2 U	1.18	1.42	0.88 UJ	0.72 J	1.3	1.72	1.06	1.55
13	MW13-5	Groundwater	DIN	Barium	ug/l	5 U	5 U	5 U		3.3 J	3.1 J	3.4 J	3.28	2.69	4.59	3.19	3.34	6.6 J		2.67	1.97
13	MW13-5	Groundwater	DIN	Beryllium	ug/l	1 U	1 U	1 U		0.33 U	5.1	0.6 U	0.5 U	0.15 U	0.15 U	1 U	1 U	0.043 U	0.020 U		
13	MW13-5	Groundwater	DIN	Cadmium	ug/l	1 U	1 U	1 U		0.047 U	3.9	0.3 U	2 U	0.2 U	0.2 U	1 U	0.1 U	0.42 J	0.038 J		
13	MW13-5	Groundwater	DIN	Calcium	ug/l	43800	35200	26400		48700	54400	45200	66500	53800	68000						
13	MW13-5	Groundwater	DIN	Chromium	ug/l	5 U	5 U	5 U		6.4 U	0.6 U	0.4 J	14	0.295	6.05	0.94 UJ	1 U	1.0 U	0.93 J		
13	MW13-5	Groundwater	DIN	Cobalt	ug/l	5 U	5 U	5 U		2.9 U	0.043 U	0.5 U	0.4 U	0.5 U	5.14						
13	MW13-5	Groundwater	DIN	Copper	ug/l	8.1 J	9.1 J	11.1		6.5 J	6.5	4.6 J	4.44	4.92	6.05	4.83	3.44	6.1 J	3.62		
13	MW13-5	Groundwater	DIN	Iron	ug/l	20 U	20 U	20 U		15.1	1340	17 J	1000 U	50 U	50 U						
13	MW13-5	Groundwater	DIN	Lead	ug/l	2 U	2 U	1 U		0.019 U	0.076 J	1.6 U	0.3 U	0.102	0.45	1 U	1 U	0.075 U	0.031		
13	MW13-5	Groundwater	DIN	Magnesium	ug/l	23100	16600	14200		25500	23300	24200	28800	23800	28000						
13	MW13-5	Groundwater	DIN	Manganese	ug/l	2 U	2 U	2 U		1.7 J	3.9 J	0.2 U	10 U	0.504	8.07						
13	MW13-5	Groundwater	DIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ		0.1 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U		
13	MW13-5	Groundwater	DIN	Nickel	ug/l	5 U	5 U	5 U		3.6 U	1.1 U	0.7 U	1.52	2.34	2.81	1.03 UJ	0.932 J	1.7 J	1.35		
13	MW13-5	Groundwater	DIN	Potassium	ug/l	9500	7660	15200 J		9170	7620	11600 J	8060	7120	8500						
13	MW13-5	Groundwater	DIN	Selenium	ug/l	3 U	3 U	2.4 J		1.7 J	1.9 J	1.4 J	2.5 U	0.666	2.31	1.92	2 U	2.9 J	2.6 J		
13	MW13-5	Groundwater	DIN	Silver	ug/l	5 U	5 U	5 U		3 U	0.5 U	0.7 U	1 U	0.225	0.1 U	1 U	1 U	0.085 U	0.030 U		
13	MW13-5	Groundwater	DIN	Sodium	ug/l	158000	101000	235000		103000	63100	84100 J		69600	120000						
13	MW13-5	Groundwater	DIN	Thallium	ug/l	3 UJ	3 U	2 U		0.69 J	0.14 J	3.5 U	0.5 U	0.05 U	0.104	1 U	1 U	0.044 U	0.020 U		
13	MW13-5	Groundwater	DIN	Vanadium	ug/l	5 U	5 U	5 U		3.6 J	3.4 J	3.1 J	10 U	5 U	5 U						
13	MW13-5	Groundwater	DIN	Zinc	ug/l	5 U	7 J	6.3 J		9.6 J	5.8	108	31.9	7.43	6.38	4.83 J	3.92 J	6.0 J	7.27 J		
13	MW13-5	Groundwater	P/A	4,4-DDD	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U	0.02 U	0.02 U	0.033 U	0.0206 U							
13	MW13-5	Groundwater	P/A	4,4-DDE	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U	0.02 U	0.02 U	0.033 U	0.0206 U							
13	MW13-5	Groundwater	P/A	4,4-DDT	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U	0.02 U	0.02 U	0.033 U	0.0206 U							
13	MW13-5	Groundwater	P/A	Aldrin	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U	0.01 U	0.0099 U	0.033 U	0.00909 U							
13	MW13-5	Groundwater	P/A	alpha-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U	0.01 U	0.0099 U	0.033 U	0.0109 U							
13	MW13-5	Groundwater	P/A	alpha-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U	0.01 U	0.0099 U	0.033 U	0.0103 U							
13	MW13-5	Groundwater	P/A	Aroclor 1016	ug/l	0.2 U	0.2 U	0.2 U		0.215 U	0.2 U	0.2 U	0.109 U	0.52 U							
13	MW13-5	Groundwater	P/A	Aroclor 1221	ug/l	0.4 U	0.4 U	0.4 U		0.43 U	0.4 U	0.4 U	0.109 U	0.52 U							
13	MW13-5	Groundwater	P/A	Aroclor 1232	ug/l	0.2 U	0.2 U	0.2 U		0.215 U	0.2 U	0.2 U	0.109 U	0.52 U							
13	MW13-5	Groundwater	P/A	Aroclor 1242	ug/l	0.2 U	0.2 U	0.2 U		0.215 U	0.2 U	0.2 U	0.109 U	0.52 U							
13	MW13-5	Groundwater	P/A	Aroclor 1248	ug/l	0.2 U	0.2 U	0.2 U		0.215 U	0.2 U	0.2 U	0.109 U	0.52 U							
13	MW13-5	Groundwater	P/A	Aroclor 1254	ug/l	0.2 U	0.2 U	0.2 U		0.215 U	0.2 U	0.2 U	0.109 U	0.52 U							
13	MW13-5	Groundwater	P/A	Aroclor 1260	ug/l	0.2 U	0.2 U	0.2 U		0.215 U	0.2 U	0.2 U	0.109 U	0.52 U							
13	MW13-5	Groundwater	P/A	beta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U	0.01 U	0.0099 U	0.033 U	0.0123 U							
13	MW13-5	Groundwater	P/A	Chlordane	ug/l									0.0103 U							
13	MW13-5	Groundwater	P/A	Chlordane (total)	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U											

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-5	Groundwater	P/A	DDT (total)	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U											
13	MW13-5	Groundwater	P/A	delta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U	0.01 U	0.0099 U	0.033 U	0.0104 U							
13	MW13-5	Groundwater	P/A	Dieldrin	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U	0.02 U	0.02 U	0.033 U	0.0206 U							
13	MW13-5	Groundwater	P/A	Endosulfan (total)	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U											
13	MW13-5	Groundwater	P/A	Endosulfan I	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U	0.01 U	0.0099 U	0.033 U	0.0206 U							
13	MW13-5	Groundwater	P/A	Endosulfan II	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U	0.02 U	0.02 U	0.033 U	0.0206 U							
13	MW13-5	Groundwater	P/A	Endosulfan sulfate	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U	0.02 U	0.02 U	0.033 U	0.0206 U							
13	MW13-5	Groundwater	P/A	Endrin	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U	0.02 U	0.02 U	0.033 U	0.0206 U							
13	MW13-5	Groundwater	P/A	Endrin Aldehyde	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U	0.02 U	0.02 U	0.033 U	0.0214 U							
13	MW13-5	Groundwater	P/A	Endrin ketone	ug/l	0.02 U	0.02 U	0.02 U		0.0215 U	0.02 U	0.02 U	0.033 U								
13	MW13-5	Groundwater	P/A	gamma-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U	0.01 U	0.0099 U	0.033 U	0.0103 U							
13	MW13-5	Groundwater	P/A	Heptachlor	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U	0.01 U	0.0099 U	0.033 U	0.0189 U							
13	MW13-5	Groundwater	P/A	Heptachlor epoxide	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U	0.01 U	0.0099 U	0.033 U	0.00869 U							
13	MW13-5	Groundwater	P/A	Lindane	ug/l	0.01 U	0.01 U	0.01 U		0.0108 U	0.01 U	0.0099 U	0.033 U	0.0103 U							
13	MW13-5	Groundwater	P/A	Methoxychlor	ug/l	0.1 U	0.1 UJ	0.1 UJ		0.108 U	0.1 U	0.099 U	0.033 U	0.0516 U							
13	MW13-5	Groundwater	P/A	PCB (Sum Detect + .5 NonDetect)	ug/l	0.4 U	0.4 U	0.4 U		0.43 U											
13	MW13-5	Groundwater	P/A	Toxaphene	ug/l	1 U	1 U	1 U		1.08 U	1 U	0.99 U	2.7 U	0.515 U							
13	MW13-5	Groundwater	SVOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				5 U	29 U		5.1 U						
13	MW13-5	Groundwater	SVOA	1,2-Dichlorobenzene	ug/l							5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	1,3-Dichlorobenzene	ug/l							5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	1,4-Dichlorobenzene	ug/l							5 U	23 U								
13	MW13-5	Groundwater	SVOA	2,2-oxybis(1-Chloropropane)	ug/l	1 U	1 U	1 UJ		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	2,4,5-Trichlorophenol	ug/l	5 U	5 U	5 U		21 U	20 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	2,4,6-Trichlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	2,4-Dichlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	2,4-Dimethylphenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		26 U						
13	MW13-5	Groundwater	SVOA	2,4-Dinitrophenol	ug/l	5 U	5 U	5 U		21 U	20 U	10 U	210 U		100 U						
13	MW13-5	Groundwater	SVOA	2,4-Dinitrotoluene	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	2,6-Dinitrotoluene	ug/l	2 U	1 U	2 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	2-Chloronaphthalene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	29 U		10 U						
13	MW13-5	Groundwater	SVOA	2-Chlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	2-Methylnaphthalene	ug/l	1 U	1 U	1 UJ		5 U	5 U	5 U	29 U	0.051 U	0.054 U					0.0092 J	
13	MW13-5	Groundwater	SVOA	2-Methylphenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	2-Nitroaniline	ug/l	5 U	5 U	5 UJ		21 U	20 U	5 U	23 U		100 U						
13	MW13-5	Groundwater	SVOA	2-Nitrophenol	ug/l	2 U	1 U	2 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	3,3-Dichlorobenzidine	ug/l	5 UJ	1 U	1 U		5 U	5 U	5 U	23 U		20 U						
13	MW13-5	Groundwater	SVOA	3-Nitroaniline	ug/l	5 U	5 U	5 U		21 U	20 U	5 U	23 U		51 U						
13	MW13-5	Groundwater	SVOA	4,6-Dinitro-2-methylphenol	ug/l	5 U	5 U	5 U		21 U	20 U	5 U	210 U		26 U						
13	MW13-5	Groundwater	SVOA	4-Bromophenyl-phenylether	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	4-Chloro-3-methylphenol	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	4-Chloroaniline	ug/l	2 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	4-Chlorophenyl methylsulfone	ug/l										20 U						
13	MW13-5	Groundwater	SVOA	4-Chlorophenyl-phenylether	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	4-Methylphenol	ug/l	2 U	1 U	1 U		5 U	5 U	5 U			5.1 U						
13	MW13-5	Groundwater	SVOA	4-Nitroaniline	ug/l	5 U	5 U	5 U		21 U	20 U	5 U	23 U		51 U						
13	MW13-5	Groundwater	SVOA	4-Nitrophenol	ug/l	5 U	5 U	5 U		21 U	20 U	5 U	160 U		100 U						
13	MW13-5	Groundwater	SVOA	Acenaphthene	ug/l	1 U	1 U	0.5 U		1 U	1 U	0.98 U	29 U	0.051 U	0.054 U	0.1 U				0.0046 J	
13	MW13-5	Groundwater	SVOA	Acenaphthylene	ug/l	1 U	1 U	0.5 U		1 U	2 U	2 U	23 U	0.051 U	0.054 U					0.020 U	
13	MW13-5	Groundwater	SVOA	Aniline	ug/l								23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	Anthracene	ug/l	0.66 U	0.1 U	0.5 U		0.1 U	0.1 U	0.098 U	23 U	0.306 U	0.33 U	0.1 U				0.020 U	
13	MW13-5	Groundwater	SVOA	Azobenzene	ug/l								230 U								
13	MW13-5	Groundwater	SVOA	Benzidine	ug/l										200 U						
13	MW13-5	Groundwater	SVOA	Benzo(a)anthracene	ug/l	0.01 U	0.2 U	0.01 U		0.1 U	0.1 U	0.098 U	23 U	0.051 U	0.054 U					0.020 U	
13	MW13-5	Groundwater	SVOA	Benzo(a)pyrene	ug/l	0.02 U	0.25 U	0.02 U		0.1 U	0.1 U	0.098 U	23 U	0.0643 U	0.068 U	0.1 U				0.048 U	
13	MW13-5	Groundwater	SVOA	Benzo(b)fluoranthene	ug/l	0.02 U	1 U	0.02 U		0.1 U	0.2 U	0.2 U	23 U	0.051 U	0.054 U	0.1 U				0.020 U	
13	MW13-5	Groundwater	SVOA	Benzo(g,h,i)perylene	ug/l	0.08 U	0.75 U	0.08 UJ		0.1 U	0.2 U	0.2 U	29 U	0.0918 U	0.054 U	0.1 U				0.0029 J	
13	MW13-5	Groundwater	SVOA	Benzo(k)fluoranthene	ug/l	0.02 U	0.3 U	0.02 UJ		0.1 U	0.1 U	0.098 U	29 U	0.102 U	0.054 U	0.1 U				0.020 U	

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-5	Groundwater	SVOA	Benzofluoranthenes (total)	ug/l	0.02 U	1 U	0.02 U		0.1 U											
13	MW13-5	Groundwater	SVOA	Benzoic acid	ug/l								57 U		130 U						
13	MW13-5	Groundwater	SVOA	Benzyl alcohol	ug/l								23 U		10 U						
13	MW13-5	Groundwater	SVOA	bis(2-Chloroethoxy)methane	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	29 U		5.1 U						
13	MW13-5	Groundwater	SVOA	bis(2-Chloroethyl)ether	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	bis(2-Ethylhexyl)adipate												10 U					
13	MW13-5	Groundwater	SVOA	bis(2-Ethylhexyl)phthalate	ug/l	50	1 U	1 U		1 J	5 U	3 J	23 U		5.1 U	1.17 UJ		0.49 U		2.0 U	
13	MW13-5	Groundwater	SVOA	Butylbenzylphthalate	ug/l	1 U	1 U	1 UJ		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	Carbazole	ug/l							5 U									
13	MW13-5	Groundwater	SVOA	Chrysene	ug/l	0.15 U	0.2 U	0.15 U		0.052 U	0.1 U	0.098 U	23 U	0.051 U	0.054 U					0.020 U	
13	MW13-5	Groundwater	SVOA	CPAH (total)	ug/l	0.15 U	1 U	0.15 U		0.52 U											
13	MW13-5	Groundwater	SVOA	Dibenz(a,h)anthracene	ug/l	0.03 U	1 U	0.03 U		0.52 U	0.2 U	0.2 U	29 U	0.153 U	0.054 U					0.0036 J	
13	MW13-5	Groundwater	SVOA	Dibenzofuran	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	Diethylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	Dimethylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	Di-n-butylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	Di-n-octylphthalate	ug/l	5	1 U	1 UJ		12	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	Fluoranthene	ug/l	0.21 U	0.5 U	0.21 UJ		0.52 U	0.2 U	0.2 U	23 U	0.051 U	0.054 U	0.1 U				0.020 U	
13	MW13-5	Groundwater	SVOA	Fluorene	ug/l	0.21 U	0.5 U	0.21 UJ		0.1 U	0.1 U	0.098 U	23 U	0.122 U	0.054 U	0.1 U				0.0051 J	
13	MW13-5	Groundwater	SVOA	Hexachlorobenzene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U	5 U					
13	MW13-5	Groundwater	SVOA	Hexachlorobutadiene	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	34 U		5.1 U						
13	MW13-5	Groundwater	SVOA	Hexachlorocyclopentadiene	ug/l	2 U	1 U	1 U		5 U	5 U	5 U	34 U		10 U	10 UJ					
13	MW13-5	Groundwater	SVOA	Hexachloroethane	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	HPAH (total)	ug/l	0.27 U	1 U	0.27 U		0.52 U											
13	MW13-5	Groundwater	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.04 U	0.3 U	0.04 U		0.1 U	0.1 U	0.098 U	23 U	0.204 U	0.054 U					0.0033 J	
13	MW13-5	Groundwater	SVOA	Isophorone	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	29 U		5.1 U						
13	MW13-5	Groundwater	SVOA	LPAH (total)	ug/l	1 U	1 U	0.5 U		2.1 U											
13	MW13-5	Groundwater	SVOA	m,p-Cresols	ug/l								23 U								
13	MW13-5	Groundwater	SVOA	Naphthalene	ug/l	1 U	1 U	0.5 UJ		2.1 U	1 U	0.98 U	23 U	0.122 J	0.26 U	0.1 U				0.020 U	
13	MW13-5	Groundwater	SVOA	NCPAH (total)	ug/l	1 U	1 U	1 U		5 U											
13	MW13-5	Groundwater	SVOA	Nitrobenzene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	N-Nitrosodimethylamine	ug/l								23 U								
13	MW13-5	Groundwater	SVOA	N-Nitrosodinpropylamine	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		5.1 U						
13	MW13-5	Groundwater	SVOA	N-Nitrosodiphenylamine	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	23 U		10 U						
13	MW13-5	Groundwater	SVOA	Pentachlorophenol	ug/l	5 U	5 U	5 U		21 U	20 U	5 U	160 U		5.1 U	1 U					
13	MW13-5	Groundwater	SVOA	Phenanthrene	ug/l	0.64 U	0.25 U	0.5 U		0.1 U	0.1 U	0.098 U	23 U	0.051 U	0.054 U					0.020 U	
13	MW13-5	Groundwater	SVOA	Phenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	11 U		5.1 U						
13	MW13-5	Groundwater	SVOA	Pyrene	ug/l	0.27 U	0.1 U	0.27 UJ		0.1 U	0.1 U	0.098 U	23 U	0.051 U	0.054 U	0.1 U				0.020 U	
13	MW13-5	Groundwater	TIN	Aluminum	ug/l	50 UJ	52.1 J	50 U	592	27 U	512	80.6 U	105	197	397						
13	MW13-5	Groundwater	TIN	Antimony	ug/l	5 U	5 U	5 U	5 U	1.2 J	2.1 J	2.3 J	1.34	1.64	1.76	1.65	1.7		1.76		
13	MW13-5	Groundwater	TIN	Arsenic	ug/l	2 UJ	2 U	2 U	2 U	0.41 J	1.6 J	2.9 U	5 U	1.15	1.63	0.82 J	1.2	1.2	2.03	1.15	1.45
13	MW13-5	Groundwater	TIN	Barium	ug/l	5 U	5 U	5 U	4.1	3.3 J	4.1 J	3.1 J	3.97	3.35	5.76	3.27	5.6	5.5 J		4.67	2.66
13	MW13-5	Groundwater	TIN	Beryllium	ug/l	1 U	1 U	1 U	0.26 U	0.33 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U		
13	MW13-5	Groundwater	TIN	Cadmium	ug/l	5.5	1 U	1 U	0.057 UJ	0.047 U	0.11 J	0.3 U	2 U	0.2 U	0.2 U	1 UJ	0.1 U	0.094 U	0.049 J		
13	MW13-5	Groundwater	TIN	Calcium	ug/l	43800	36000	26300	34500	48700	59400	45100	69000	47400							
13	MW13-5	Groundwater	TIN	Chromium	ug/l	5 U	5 U	5 U	7.3 J	6.4 U	1.3 J	0.4 J	6 U	0.397	0.653	1 UJ	1.25	1.0 U	0.76 J		
13	MW13-5	Groundwater	TIN	Cobalt	ug/l	5 U	5 U	5 U	4 U	2.9 U	0.42 J	0.5 U	0.8 U	0.16	0.291						
13	MW13-5	Groundwater	TIN	Copper	ug/l	6.9 J	9.5 J	11.5	4 UJ	6.5 J	7.3	5.4 J	6 U	27.8	5.23	4.54	6.32	6.6	3.84		
13	MW13-5	Groundwater	TIN	Iron	ug/l	20 UJ	20 U	20 U	1180	15.1	267	13.1 J	1000 U	69.3							
13	MW13-5	Groundwater	TIN	Lead	ug/l	2 U	2 U	1 U	2 U	0.019 U	0.26 J	1.6 U	2 U	0.376	0.619	1 U	1 U	0.094 J	0.110		
13	MW13-5	Groundwater	TIN	Magnesium	ug/l	23200	16900	14200	19700	25500	29400	23800	30300	24300							
13	MW13-5	Groundwater	TIN	Manganese	ug/l	2 U	2 U	2 U	256	1.7 J	11.3	0.3 J	4 U	2.59	5.61						
13	MW13-5	Groundwater	TIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U		
13	MW13-5	Groundwater	TIN	Nickel	ug/l	5 U	5 U	5 U	4 U	3.6 U	1.1 U	0.7 U	2 U	2.05	2.93	1.88 J	1.3 J	2.0	1.38		
13	MW13-5	Groundwater	TIN	Potassium	ug/l	9510	7470	14900 J	8960	9170	8350	11400 J	8170	7070							
13	MW13-5	Groundwater	TIN	Selenium	ug/l	3 U	3 U	2.4 J	0.48 U	2 J	3	1.1 U	5 U	1.21	2.56	2.28	2 U	2.4 J	3.2 J		
13	MW13-5	Groundwater	TIN	Silver	ug/l	5 U	5 U	5 U	4 U	3 U	0.5 U	0.7 U	2 U	0.35 U	0.35 U	1 U	1 U	0.085 U	0.030 U		

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						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-5	Groundwater	TIN	Sodium	ug/l	159000	101000	239000	118000	103000	76600	84000 J		64500							
13	MW13-5	Groundwater	TIN	Thallium	ug/l	3 UJ	3 UJ	2 U	10 U	0.008 U	0.28 J	3.5 U	1 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U		
13	MW13-5	Groundwater	TIN	Vanadium	ug/l	5 U	5 U	5 U	3 UJ	3.6	4.1 J	3.2 J	20 U	3.53	4.82						
13	MW13-5	Groundwater	TIN	Zinc	ug/l	5 U	6.6 J	6.8 J	32.3 U	9.6	6.9	5.1 U	25 U	12.2	5.03	5.22 J	6.07 J	5.5 J	4.32 J		
13	MW13-5	Groundwater	VOA	1,1,1,2-Tetrachloroethane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	1,1,2-Trichlorotrifluoroethane	ug/l									2 U	2 U						
13	MW13-5	Groundwater	VOA	1,1-Dichloroethane	ug/l	1 UJ	1 U	1 U	1 U	0.29 J	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	1,1-Dichloroethene	ug/l	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	1,1-Dichloropropene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	1,2,3-Trichlorobenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	1,2,3-Trichloropropane	ug/l								2 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	1,2,4-Trichlorobenzene	ug/l					1 U	1 U		2 U	2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW13-5	Groundwater	VOA	1,2,4-Trimethylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		2.5 U	10 U	10 U	5 UJ		1.0 U		2.0 U	
13	MW13-5	Groundwater	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW13-5	Groundwater	VOA	1,2-Dichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	1,3,5-Trimethylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	1,3-Dichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	1,3-Dichloropropane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U											
13	MW13-5	Groundwater	VOA	1,4-Dichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	2,2-Dichloropropane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	2-Butanone	ug/l	5 U	5 U	5 U		5 U	5 U	5 U	50 U	50 U	50 U	10 UJ		5.0 U			
13	MW13-5	Groundwater	VOA	2-Chloroethyl vinyl ether	ug/l								10 U	10 U	10 U						
13	MW13-5	Groundwater	VOA	2-Chlorotoluene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	20 U	20 U	10 UJ		5.0 U			
13	MW13-5	Groundwater	VOA	4-Chlorotoluene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	4-Isopropyltoluene	ug/l								1 U	2 U	2 U	2 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	20 U	20 U	5 UJ		5.0 U			
13	MW13-5	Groundwater	VOA	Acetone	ug/l	5 U	5 U	5 U		5 U	5 U	5 U		50 U	4.5 J	25 UJ		5.0 U		20 UJ	
13	MW13-5	Groundwater	VOA	Acrylonitrile	ug/l									10 U	10 U						
13	MW13-5	Groundwater	VOA	Benzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U	0.5 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	Bromobenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Bromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	5 U	5 U	5 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	BTEX (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U											
13	MW13-5	Groundwater	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	2.1	1 U	1 U	1 U	10 U	2 U	2 U	10 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	Chlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Chloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 UJ		1.0 UJ		0.50 U	
13	MW13-5	Groundwater	VOA	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Dibromomethane	ug/l								2 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Dichlorodifluoromethane	ug/l							1 U	1 U	5 U	5 U	5 UJ		1.0 UJ			
13	MW13-5	Groundwater	VOA	Ethylbenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	Hexachlorobutadiene	ug/l								2 U	2 U	2 U	4 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Iodomethane	ug/l									5 U	5 U						

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW13-5	Groundwater	VOA	Isopropylbenzene	ug/l								1 U	2 U	2 U	2 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	m,p-Xylene	ug/l	0.2 U	0.2 U	0.2 U				0.6 J		2 U	2 U	2 UJ		2.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	Methyl Tert-Butyl Ether	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Methylene chloride	ug/l	2 U	1 U	1 U	2 U	2 U	2 U	1 U	5 U	5 U	5 UJ	5 UJ		1.0 U		2.0 U	
13	MW13-5	Groundwater	VOA	m-Xylene	ug/l					0.4 U											
13	MW13-5	Groundwater	VOA	Naphthalene	ug/l								2 U	2 U	2 U	2 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	n-Butylbenzene	ug/l								1 U	2 U	2 U	5 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	n-Propylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	o-Xylene	ug/l	0.2 U	0.2 U	0.2 U		0.2 U		1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	sec-Butylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	tert-Butylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	Toluene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.3 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		1.2 U	
13	MW13-5	Groundwater	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	trans-1,4-Dichloro-2-butene	ug/l									10 U	10 U						
13	MW13-5	Groundwater	VOA	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	0.15 J	0.6 J	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	Trichlorofluoromethane	ug/l							1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW13-5	Groundwater	VOA	Vinyl acetate	ug/l									5 U	5 U						
13	MW13-5	Groundwater	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 UJ	1 UJ		1.0 U		0.50 U	
13	MW13-5	Groundwater	VOA	Xylenes	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		2 U							1.0 U	
13	MW13-5	Groundwater	VOA	Xylenes (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U										1.0 U	
13	MW-603	Groundwater	DIN	Aluminum	ug/l	50 U	50 U	50 U		27 U	50.5 J	80.6 U	2.5 U	1.82	5 U						
13	MW-603	Groundwater	DIN	Antimony	ug/l	8.9 J	5 U	5 U		0.35 J	0.77 J	1.6 U	0.557	0.87	1.73	0.9 UJ	0.815 J	1.3 J	0.93		
13	MW-603	Groundwater	DIN	Arsenic	ug/l	2 U	2 U	2 U		2.5	1.4 J	2.9 U	2 U	1.74	35.9	1.67 UJ	0.63 J	2.2	3.29	1.08	2.03
13	MW-603	Groundwater	DIN	Barium	ug/l	5 U	12 J	5 U		1.2 J	0.7 J	5.5 J	1 U	0.631	11.2	1.5	1.04	3.8		0.57	1.15
13	MW-603	Groundwater	DIN	Beryllium	ug/l	1 U	1 U	1 U		0.33 U	0.28 U	0.6 U	0.5 U	0.15 U	0.75 U	1 U	1 U	0.043 U	0.020 U		
13	MW-603	Groundwater	DIN	Cadmium	ug/l	3.6 J	1 U	1 U		0.047 U	0.053 U	0.3 U	2 U	1.48	1 U	1 U	0.1 U	0.094 UJ	0.045 J		
13	MW-603	Groundwater	DIN	Calcium	ug/l	41400	110000	43100		24100	27600	111000	20400	19800	220000						
13	MW-603	Groundwater	DIN	Chromium	ug/l	5 U	5 U	5 U		6.4 U	4.4 J	0.6 J	6.77	4.71	6.92	1.04 UJ	1 U	1.0 U	1.07		
13	MW-603	Groundwater	DIN	Cobalt	ug/l	5 U	5 U	5 U		2.9 U	0.56 J	0.5 U	0.4 U	0.5 U	3.02						
13	MW-603	Groundwater	DIN	Copper	ug/l	3.1 J	2.3 J	3.1 J		3 J	4.2 J	2.6 J	3 U	2.58	13	2.85	2.1	7.2 J	2.82		
13	MW-603	Groundwater	DIN	Iron	ug/l	20 U	20 U	20 U		95.9	31.9 J	12.8 U	1000 U	50 U	1800						
13	MW-603	Groundwater	DIN	Lead	ug/l	2 U	2 UJ	1 U		0.019 U	0.36 J	1.6 U	0.3 U	0.206	0.52	1 U	1 U	0.28 J	0.030 U		
13	MW-603	Groundwater	DIN	Magnesium	ug/l	78600	220000	91500		41500	26800	213000	30500	29000	640000						
13	MW-603	Groundwater	DIN	Manganese	ug/l	143	319	31		13.1	153	0.2 U	10 U	9.91	24						
13	MW-603	Groundwater	DIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ		0.1 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.0918 J	0.20 U		
13	MW-603	Groundwater	DIN	Nickel	ug/l	5 U	5 U	5 U		3.6 U	4.4 J	0.7 U	1 U	0.748	10.4	0.66 UJ	0.514 J	0.89 J	0.93		
13	MW-603	Groundwater	DIN	Potassium	ug/l	28500	70500	67500 J		21800	14500	132000 J	19600	18200	230000						
13	MW-603	Groundwater	DIN	Selenium	ug/l	3 U	3 UJ	2.1 J		8.3	5.8	1.1 U	3.22	2.52	156	3.32	2 U	5.7 J	9.2 J		
13	MW-603	Groundwater	DIN	Silver	ug/l	5 U	5 U	5 U		3 U	0.5 U	0.7 U	1 U	0.1 U	0.5 U	1 U	1 U	0.085 U	0.057		
13	MW-603	Groundwater	DIN	Sodium	ug/l	575000	1450000	824000		409000	121000	1240000 J		223000	5800000						
13	MW-603	Groundwater	DIN	Thallium	ug/l	3 UJ	3 UJ	2 UJ		0.008 U	0.66 J	3.5 U	0.5 U	0.05 U	0.433	1 U	1 U	0.044 U	0.020 U		
13	MW-603	Groundwater	DIN	Vanadium	ug/l	5 U	5 U	5 U		2 U	1 J	0.8 J	10 U	5 U	149						
13	MW-603	Groundwater	DIN	Zinc	ug/l	5 U	5 U	5 U		8.5 J	5.7	6.6 J	19.3	9.78	9.6	5 U	5 U	5.5 J	2.34 J		
13	MW-603	Groundwater	P/A	4,4-DDD	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U	0.02 U	0.019 U	0.037 U	0.02 U							
13	MW-603	Groundwater	P/A	4,4-DDE	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U	0.02 U	0.019 U	0.037 U	0.02 U							
13	MW-603	Groundwater	P/A	4,4-DDT	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U	0.02 U	0.019 U	0.037 U	0.02 U							
13	MW-603	Groundwater	P/A	Aldrin	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U	0.01 U	0.0097 U	0.037 U	0.0089 U							
13	MW-603	Groundwater	P/A	alpha-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U	0.01 U	0.0097 U	0.037 U	0.011 U							
13	MW-603	Groundwater	P/A	alpha-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U	0.01 U	0.0097 U	0.037 U	0.01 U							
13	MW-603	Groundwater	P/A	Aroclor 1016	ug/l	0.2 U	0.2 U	0.2 U		0.225 U	0.2 U	0.19 U	0.123 U	0.51 U							
13	MW-603	Groundwater	P/A	Aroclor 1221	ug/l	0.4 U	0.4 U	0.4 U		0.449 U	0.4 U	0.39 U	0.123 U	0.51 U							
13	MW-603	Groundwater	P/A	Aroclor 1232	ug/l	0.2 U	0.2 U	0.2 U		0.225 U	0.2 U	0.19 U	0.123 U	0.51 U							
13	MW-603	Groundwater	P/A	Aroclor 1242	ug/l	0.2 U	0.2 U	0.2 U		0.225 U	0.2 U	0.19 U	0.123 U	0.51 U							
13	MW-603	Groundwater	P/A	Aroclor 1248	ug/l	0.2 U	0.2 U	0.2 U		0.225 U	0.2 U	0.19 U	0.123 U	0.51 U							

Table C-2-C
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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-603	Groundwater	P/A	Aroclor 1254	ug/l	0.2 U	0.2 U	0.2 U		0.225 U	0.2 U	0.19 U	0.123 U	0.51 U							
13	MW-603	Groundwater	P/A	Aroclor 1260	ug/l	0.2 U	0.2 U	0.2 U		0.225 U	0.2 U	0.19 U	0.123 U	0.51 U							
13	MW-603	Groundwater	P/A	beta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U	0.01 U	0.0097 U	0.037 U	0.012 U							
13	MW-603	Groundwater	P/A	Chlordane	ug/l									0.01 U							
13	MW-603	Groundwater	P/A	Chlordane (total)	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U											
13	MW-603	Groundwater	P/A	DDT (total)	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U											
13	MW-603	Groundwater	P/A	delta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U	0.01 U	0.0097 U	0.037 U	0.01 U							
13	MW-603	Groundwater	P/A	Dieldrin	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U	0.02 U	0.019 U	0.037 U	0.02 U							
13	MW-603	Groundwater	P/A	Endosulfan (total)	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U											
13	MW-603	Groundwater	P/A	Endosulfan I	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U	0.01 U	0.0097 U	0.037 U	0.02 U							
13	MW-603	Groundwater	P/A	Endosulfan II	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U	0.02 U	0.019 U	0.037 U	0.02 U							
13	MW-603	Groundwater	P/A	Endosulfan sulfate	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U	0.02 U	0.019 U	0.037 U	0.02 U							
13	MW-603	Groundwater	P/A	Endrin	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U	0.02 U	0.019 U	0.037 U	0.02 U							
13	MW-603	Groundwater	P/A	Endrin Aldehyde	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U	0.02 U	0.019 U	0.037 U	0.021 U							
13	MW-603	Groundwater	P/A	Endrin ketone	ug/l	0.02 U	0.02 U	0.02 U		0.0225 U	0.02 U	0.019 U	0.037 U								
13	MW-603	Groundwater	P/A	gamma-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U	0.01 U	0.0097 U	0.037 U	0.01 U							
13	MW-603	Groundwater	P/A	Heptachlor	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U	0.01 U	0.0097 U	0.037 U	0.018 U							
13	MW-603	Groundwater	P/A	Heptachlor epoxide	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U	0.01 U	0.0097 U	0.037 U	0.0085 U							
13	MW-603	Groundwater	P/A	Lindane	ug/l	0.01 U	0.01 U	0.01 U		0.0112 U	0.01 U	0.0097 U	0.037 U	0.01 U							
13	MW-603	Groundwater	P/A	Methoxychlor	ug/l	0.1 U	0.1 UJ	0.1 UJ		0.112 U	0.1 U	0.097 U	0.037 U	0.051 U							
13	MW-603	Groundwater	P/A	PCB (Sum Detect + .5 NonDetect)	ug/l	0.4 U	0.4 U	0.4 U		0.449 U											
13	MW-603	Groundwater	P/A	Toxaphene	ug/l	1 U	1 U	1 U		1.12 U	1 U	0.97 U	3.1 U	0.51 U							
13	MW-603	Groundwater	SVOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				5 U	28 U		5.1 U						
13	MW-603	Groundwater	SVOA	1,2-Dichlorobenzene	ug/l							5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	1,3-Dichlorobenzene	ug/l							5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	1,4-Dichlorobenzene	ug/l							5 U	22 U								
13	MW-603	Groundwater	SVOA	2,2-oxybis(1-Chloropropane)	ug/l	1 U	1 U	1 UJ		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	2,4,5-Trichlorophenol	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	2,4,6-Trichlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	2,4-Dichlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	2,4-Dimethylphenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		26 U						
13	MW-603	Groundwater	SVOA	2,4-Dinitrophenol	ug/l	5 U	5 U	5 U		22 U	20 U	10 U	200 U		100 U						
13	MW-603	Groundwater	SVOA	2,4-Dinitrotoluene	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	2,6-Dinitrotoluene	ug/l	2 U	1 U	2 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	2-Chloronaphthalene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	28 U		10 U						
13	MW-603	Groundwater	SVOA	2-Chlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	2-Methylnaphthalene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	28 U	0.052 U	0.054 U					0.020 U	
13	MW-603	Groundwater	SVOA	2-Methylphenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	2-Nitroaniline	ug/l	5 U	5 U	5 UJ		22 U	20 U	5 U	22 U		100 U						
13	MW-603	Groundwater	SVOA	2-Nitrophenol	ug/l	2 U	1 U	2 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	3,3-Dichlorobenzidine	ug/l	5 UJ	1 U	1 U		6 U	5 U	5 U	22 U		20 U						
13	MW-603	Groundwater	SVOA	3-Nitroaniline	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	22 U		51 U						
13	MW-603	Groundwater	SVOA	4,6-Dinitro-2-methylphenol	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	200 U		26 U						
13	MW-603	Groundwater	SVOA	4-Bromophenyl-phenylether	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	4-Chloro-3-methylphenol	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	4-Chloroaniline	ug/l	2 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	4-Chlorophenyl methylsulfone	ug/l										20 U						
13	MW-603	Groundwater	SVOA	4-Chlorophenyl-phenylether	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	4-Methylphenol	ug/l	2 U	1 U	1 U		6 U	5 U	5 U			5.1 U						
13	MW-603	Groundwater	SVOA	4-Nitroaniline	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	22 U		51 U						
13	MW-603	Groundwater	SVOA	4-Nitrophenol	ug/l	5 U	5 U	5 UJ		22 U	20 U	5 U	160 U		100 U						
13	MW-603	Groundwater	SVOA	Acenaphthene	ug/l	1 U	1 U	0.5 U		1.1 U	1 U	0.97 U	28 U	0.052 U	0.054 U	0.1 U				0.020 U	
13	MW-603	Groundwater	SVOA	Acenaphthylene	ug/l	1 U	1 U	0.5 U		1.1 U	2 U	1.9 U	22 U	0.052 U	0.054 U					0.020 U	
13	MW-603	Groundwater	SVOA	Aniline	ug/l								22 U		5.1 U						
13	MW-603	Groundwater	SVOA	Anthracene	ug/l	0.66 U	0.1 U	0.5 U		0.11 U	0.1 U	0.097 U	22 U	0.31 U	0.33 U	0.1 U				0.020 U	
13	MW-603	Groundwater	SVOA	Azobenzene	ug/l								220 U								
13	MW-603	Groundwater	SVOA	Benzidine	ug/l										200 U						

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-603	Groundwater	SVOA	Benzo(a)anthracene	ug/l	0.01 U	0.2 U	0.01 U		0.11 U	0.1 U	0.097 U	22 U	0.052 U	0.054 U					0.020 U	
13	MW-603	Groundwater	SVOA	Benzo(a)pyrene	ug/l	0.02 U	0.25 U	0.02 U		0.11 U	0.1 U	0.097 U	22 U	0.066 U	0.068 U	0.1 U				0.020 U	
13	MW-603	Groundwater	SVOA	Benzo(b)fluoranthene	ug/l	0.02 U	1 U	0.02 U		0.11 U	0.2 U	0.19 U	22 U	0.052 U	0.054 U	0.1 U				0.020 U	
13	MW-603	Groundwater	SVOA	Benzo(g,h,i)perylene	ug/l	0.08 U	0.75 U	0.08 UJ		0.11 U	0.2 U	0.19 U	28 U	0.094 U	0.054 U	0.1 U				0.0019 J	
13	MW-603	Groundwater	SVOA	Benzo(k)fluoranthene	ug/l	0.02 U	0.3 U	0.02 UJ		0.11 U	0.1 U	0.097 U	28 U	0.1 U	0.054 U	0.1 U				0.020 U	
13	MW-603	Groundwater	SVOA	Benzofluoranthenes (total)	ug/l	0.02 U	1 U	0.02 U		0.11 U											
13	MW-603	Groundwater	SVOA	Benzoic acid	ug/l								56 U		130 U						
13	MW-603	Groundwater	SVOA	Benzyl alcohol	ug/l								22 U		10 U						
13	MW-603	Groundwater	SVOA	bis(2-Chloroethoxy)methane	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	28 U		5.1 U						
13	MW-603	Groundwater	SVOA	bis(2-Chloroethyl)ether	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	bis(2-Ethylhexyl)adipate												10 U					
13	MW-603	Groundwater	SVOA	bis(2-Ethylhexyl)phthalate	ug/l	620	1 U	0.9 J		6 U	2.53 J	28	22 U		5.1 U	2.45 UJ		0.56		0.31 J	
13	MW-603	Groundwater	SVOA	Butylbenzylphthalate	ug/l	1 U	1 U	1 UJ		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	Carbazole	ug/l							5 U									
13	MW-603	Groundwater	SVOA	Chrysene	ug/l	0.15 U	0.2 U	0.15 U		0.055 U	0.1 U	0.097 U	22 U	0.052 U	0.054 U					0.020 U	
13	MW-603	Groundwater	SVOA	CPAH (total)	ug/l	0.15 U	1 U	0.15 U		0.55 U											
13	MW-603	Groundwater	SVOA	Dibenz(a,h)anthracene	ug/l	0.03 U	1 U	0.03 U		0.55 U	0.2 U	0.19 U	28 U	0.16 U	0.054 U					0.020 U	
13	MW-603	Groundwater	SVOA	Dibenzofuran	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	Diethylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	Dimethylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	Di-n-butylphthalate	ug/l	1 U	1 U	1 UJ		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	Di-n-octylphthalate	ug/l	1 U	1 U	4 J		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	Fluoranthene	ug/l	0.21 U	0.5 U	0.21 UJ		0.55 U	0.2 U	0.19 U	22 U	0.052 U	0.054 U	0.1 U				0.020 U	
13	MW-603	Groundwater	SVOA	Fluorene	ug/l	0.21 U	0.5 U	0.21 UJ		0.11 U	0.1 U	0.097 U	22 U	0.13 U	0.054 U	0.1 U				0.020 U	
13	MW-603	Groundwater	SVOA	Hexachlorobenzene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U	5 U					
13	MW-603	Groundwater	SVOA	Hexachlorobutadiene	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	33 U		5.1 U						
13	MW-603	Groundwater	SVOA	Hexachlorocyclopentadiene	ug/l	2 U	1 U	1 U		6 U	5 U	5 U	33 U		10 U	10 UJ					
13	MW-603	Groundwater	SVOA	Hexachloroethane	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	HPAH (total)	ug/l	0.27 U	1 U	0.27 U		0.55 U											
13	MW-603	Groundwater	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.04 U	0.3 U	0.04 U		0.11 U	0.1 U	0.097 U	22 U	0.21 U	0.054 U					0.020 U	
13	MW-603	Groundwater	SVOA	Isophorone	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	28 U		5.1 U						
13	MW-603	Groundwater	SVOA	LPAH (total)	ug/l	1 U	1 U	0.5 U		2.2 U											
13	MW-603	Groundwater	SVOA	m,p-Cresols	ug/l								22 U								
13	MW-603	Groundwater	SVOA	Naphthalene	ug/l	1 U	1 U	0.5 UJ		2.2 U	1 U	0.97 U	22 U	0.25 U	0.37	0.1 U				0.020 U	
13	MW-603	Groundwater	SVOA	NCPAH (total)	ug/l	1 U	1 U	1 U		6 U											
13	MW-603	Groundwater	SVOA	Nitrobenzene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	N-Nitrosodimethylamine	ug/l								22 U								
13	MW-603	Groundwater	SVOA	N-Nitrosodinpropylamine	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		5.1 U						
13	MW-603	Groundwater	SVOA	N-Nitrosodiphenylamine	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	22 U		10 U						
13	MW-603	Groundwater	SVOA	Pentachlorophenol	ug/l	5 U	5 U	5 U		22 U	20 U	5 U	160 U		5.1 U	1 U					
13	MW-603	Groundwater	SVOA	Phenanthrene	ug/l	0.64 U	0.25 U	0.5 U		0.11 U	0.1 U	0.097 U	22 U	0.052 U	0.054 U					0.020 U	
13	MW-603	Groundwater	SVOA	Phenol	ug/l	1 U	1 U	1 UJ		6 U	5 U	5 U	11 U		5.1 U						
13	MW-603	Groundwater	SVOA	Pyrene	ug/l	0.27 U	0.1 U	0.27 UJ		0.11 U	0.1 U	0.097 U	22 U	0.052 U	0.054 U	0.1 U				0.020 U	
13	MW-603	Groundwater	TIN	Aluminum	ug/l	121 UJ	50 U	50 U	148 U	27 U	298	157 J	20.2	9.41	53.6						
13	MW-603	Groundwater	TIN	Antimony	ug/l	5 U	5 U	5 U	5 U	0.13 J	0.49 J	1.6 U	1 U	0.834	5 U	0.92 J	0.792 J		0.89		
13	MW-603	Groundwater	TIN	Arsenic	ug/l	2 UJ	2 U	2 U	36.3	2	1.8 J	2.9 U	5 U	2.02	38.8	2.82	0.92 J	1.9	5.74	1.25	2.18
13	MW-603	Groundwater	TIN	Barium	ug/l	5 U	10.5 J	5 U	19.6	1.2 J	16.4 J	5.5 J	3 U	0.753	10.8	1.46	1.39	2.3 J		0.67	1.62
13	MW-603	Groundwater	TIN	Beryllium	ug/l	1 U	1 U	1 U	0.26 U	0.33 U	0.28 U	0.6 U	1 U	0.5 U	5 U	1 U	1 U	0.043 U	0.020 U		
13	MW-603	Groundwater	TIN	Cadmium	ug/l	1 U	1 U	1 U	0.057 UJ	0.047 U	0.079 J	0.3 U	2 U	0.2 U	2 U	1 U	0.1 U	0.094 U	0.052		
13	MW-603	Groundwater	TIN	Calcium	ug/l	42000	109000	43700	269000	24100	19900	112000	21000	18100							
13	MW-603	Groundwater	TIN	Chromium	ug/l	5 U	5 U	5 U	7.8 J	6.4 U	0.6 U	0.4 U	6 U	0.333	4.41	1 U	1 U	1.0 U	0.99 J		
13	MW-603	Groundwater	TIN	Cobalt	ug/l	5 U	5 U	5 U	4 U	2.9 U	0.043 U	0.5 U	0.8 U	0.1 U	1 U						
13	MW-603	Groundwater	TIN	Copper	ug/l	2 U	2.4 J	3.2 J	4 UJ	3 J	3.1 J	2.8 J	6 U	2.73	5.67	4.46	3.1	7.0	3.02		
13	MW-603	Groundwater	TIN	Iron	ug/l	187 UJ	26.3 J	20 U	250	95.9	266	47 J	1000 U	148							
13	MW-603	Groundwater	TIN	Lead	ug/l	2 U	2 U	1 U	2 U	0.019 U	0.28 J	1.6 U	2 U	0.476	3.49	1 U	1 U	0.26 J	0.110		
13	MW-603	Groundwater	TIN	Magnesium	ug/l	79900	219000	91500	728000	41500	14600	215000	31600	26900							
13	MW-603	Groundwater	TIN	Manganese	ug/l	157	323	30.8	37.4	13.1	163	3.6 J	14.2	11.7	46						

Table C-2-C
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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-603	Groundwater	TIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U		
13	MW-603	Groundwater	TIN	Nickel	ug/l	5 U	5 U	5 U	4 U	3.6 U	2.1 J	0.7 U	2 U	0.828	10.2	0.66 J	0.595 J	0.81 J	0.73		
13	MW-603	Groundwater	TIN	Potassium	ug/l	28100	68800	66800 J	214000	21800	5580	5760 J	19300	16900							
13	MW-603	Groundwater	TIN	Selenium	ug/l	3 U	3 UJ	2.1 J	104	7.3	5.4	1.1 U	6.4	3.3	164	6.75	2 U	5.4	10.0 J		
13	MW-603	Groundwater	TIN	Silver	ug/l	5 U	5 U	5 U	4 U	3 U	0.5 U	0.7 U	2 U	0.35 U	3.5 U	1 U	1 U	0.085 U	0.030 U		
13	MW-603	Groundwater	TIN	Sodium	ug/l	576000	28600	823000	5500000	409000	56100	1240000 J		224000							
13	MW-603	Groundwater	TIN	Thallium	ug/l	3 UJ	3 UJ	2 UJ	10 U	0.008 U	4.9	3.5 U	1 U	0.25 U	2.5 U	1 U	1 U	0.044 U	0.020 U		
13	MW-603	Groundwater	TIN	Vanadium	ug/l	5 U	5 U	5 U	5.3 J	2 U	0.9 J	0.7 J	20 U	2.29	52.7						
13	MW-603	Groundwater	TIN	Zinc	ug/l	5 U	5 U	5 J	31.3 U	8.5	3.3 J	16.2 J	25 U	8.76	12.6	5 U	5 U	5.0 U	2.31 J		
13	MW-603	Groundwater	VOA	1,1,1,2-Tetrachloroethane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	1,1,2-Trichlorotrifluoroethane	ug/l									2 U	2 U						
13	MW-603	Groundwater	VOA	1,1-Dichloroethane	ug/l	1 UJ	1 U	0.24 J	1 U	0.35 J	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	1,1-Dichloroethene	ug/l	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	1,1-Dichloropropene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	1,2,3-Trichlorobenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	1,2,3-Trichloropropane	ug/l								2 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	1,2,4-Trichlorobenzene	ug/l					0.15 J	1 U		2 U	2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW-603	Groundwater	VOA	1,2,4-Trimethylbenzene	ug/l								1 U	2 U	2	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		2.5 U	10 U	10 U	5 UJ		1.0 U		2.0 U	
13	MW-603	Groundwater	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW-603	Groundwater	VOA	1,2-Dichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	1,3,5-Trimethylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	1,3-Dichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.22 J	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.13 J	
13	MW-603	Groundwater	VOA	1,3-Dichloropropane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U											
13	MW-603	Groundwater	VOA	1,4-Dichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	2,2-Dichloropropane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	2-Butanone	ug/l	5 U	5 U	5 U		5 U	5 U	5 U	50 U	50 U	50 U	10 UJ		5.0 U			
13	MW-603	Groundwater	VOA	2-Chloroethyl vinyl ether	ug/l								10 U	10 U	10 U						
13	MW-603	Groundwater	VOA	2-Chlorotoluene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	20 U	20 U	10 UJ		5.0 U			
13	MW-603	Groundwater	VOA	4-Chlorotoluene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	4-Isopropyltoluene	ug/l								1 U	2 U	2 U	2 UJ		1.0 U			
13	MW-603	Groundwater	VOA	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	20 U	20 U	5 UJ		5.0 U			
13	MW-603	Groundwater	VOA	Acetone	ug/l	5 U	5 U	5 U		5 U	5 U	5 U		50 U	50 U	25 UJ		5.0 U		20 UJ	
13	MW-603	Groundwater	VOA	Acrylonitrile	ug/l									10 U	10 U						
13	MW-603	Groundwater	VOA	Benzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U	0.5 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	Bromobenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Bromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	5 U	5 U	5 UJ		1.0 U			
13	MW-603	Groundwater	VOA	BTEX (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U											
13	MW-603	Groundwater	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	2 U	10 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	Chlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Chloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	cis-1,2-Dichloroethene	ug/l	0.35 J	0.26 J	1 U	1 U	0.19 J	1 U	1 U	1 U	2 U	2 U	0.21 J		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-603	Groundwater	VOA	Dibromomethane	ug/l								2 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Dichlorodifluoromethane	ug/l							1 U	1 U	5 U	5 U	0.57 J		1.0 U			
13	MW-603	Groundwater	VOA	Ethylbenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	Hexachlorobutadiene	ug/l								2 U	2 U	2 U	4 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Iodomethane	ug/l									5 U	5 U						
13	MW-603	Groundwater	VOA	Isopropylbenzene	ug/l								1 U	2 U	2 U	2 UJ		1.0 U			
13	MW-603	Groundwater	VOA	m,p-Xylene	ug/l	0.2 U	0.2 U	0.2 U				1 U		2 U	1.8 J	2 UJ		2.0 U		0.50 U	
13	MW-603	Groundwater	VOA	Methyl Tert-Butyl Ether	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Methylene chloride	ug/l	2 U	1 U	1 U	2 U	2 U	2 U	1 U	5 U	5 U	1 U	5 UJ		1.0 U		2.0 U	
13	MW-603	Groundwater	VOA	m-Xylene	ug/l					0.4 U											
13	MW-603	Groundwater	VOA	Naphthalene	ug/l								2 U	2 U	68	2 UJ		1.0 U			
13	MW-603	Groundwater	VOA	n-Butylbenzene	ug/l								1 U	2 U	2 U	5 UJ		1.0 U			
13	MW-603	Groundwater	VOA	n-Propylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	o-Xylene	ug/l	0.2 U	0.2 U	0.2 U		0.2 U		1 U		2 U	0.64 J	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	sec-Butylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	tert-Butylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Tetrachloroethene	ug/l	0.49 J	0.47 J	0.54 J	1 U	0.75 J	0.62 J	1 U	1 U	2 U	2 U	0.35 J		1.0 U		0.33 J	
13	MW-603	Groundwater	VOA	Toluene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.3 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		1.0 U	
13	MW-603	Groundwater	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	trans-1,4-Dichloro-2-butene	ug/l									10 U	10 U						
13	MW-603	Groundwater	VOA	Trichloroethene	ug/l	0.8 J	0.72 J	0.65 J	1 U	0.84 J	1.2	1 U	1 U	0.56 J	2 U	0.43 J		1.0 U		0.53	
13	MW-603	Groundwater	VOA	Trichlorofluoromethane	ug/l							1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-603	Groundwater	VOA	Vinyl acetate	ug/l									5 U	5 U						
13	MW-603	Groundwater	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 UJ	1 UJ		1.0 U		0.50 U	
13	MW-603	Groundwater	VOA	Xylenes	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		2 U							1.0 U	
13	MW-603	Groundwater	VOA	Xylenes (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U										1.0 U	
13	MW-604	Groundwater	DIN	Aluminum	ug/l	50 U	143	50 U		34.8 J	43 U	80.6 U	10.1	16.9	8.69						
13	MW-604	Groundwater	DIN	Antimony	ug/l	5.3 J	5 U	5 U		0.19 J	0.61 J	1.6 U	0.578	0.771	1	0.54 UJ	0.745 J	0.82 UJ	1.07		
13	MW-604	Groundwater	DIN	Arsenic	ug/l	2 U	2 U	2 U		0.19 U	2	2.9 U	2 U	1.03	0.694	1.5 UJ	1.76	0.61 J	1.76	0.50 U	1.47
13	MW-604	Groundwater	DIN	Barium	ug/l	6.3 J	5 U	5.4 J		3.5 J	1.3 J	1.7 J	1.5	1.34	0.9	2.83	1.68	3.8 J		1.30	1.85
13	MW-604	Groundwater	DIN	Beryllium	ug/l	1 U	1 U	1 U		0.33 U	0.28 U	0.6 U	0.5 U	0.15 U	0.15 U	1 U	1 U	0.043 U	0.020 U		
13	MW-604	Groundwater	DIN	Cadmium	ug/l	1 U	1 U	1 U		0.047 U	0.053 U	0.3 U	2 U	0.2 U	0.2 U	1 U	0.1 U	0.27 J	0.021 J		
13	MW-604	Groundwater	DIN	Calcium	ug/l	24000	21600	34800		13700	13800	11900	6910	4530	5700						
13	MW-604	Groundwater	DIN	Chromium	ug/l	5 U	5 U	5 U		6.4 U	1.4 J	0.4 U	4.96	2.78	1.78	0.84 UJ	1 U	1.0 U	0.65 J		
13	MW-604	Groundwater	DIN	Cobalt	ug/l	5 U	5 U	5 U		2.9 U	0.043 U	0.5 U	0.4 U	0.5 U	3.27						
13	MW-604	Groundwater	DIN	Copper	ug/l	2 U	4.2 J	2 U		2.1 U	1.5 J	1.6 J	3 U	1.9	2.71 J	2.12	2.54	3.7 J	2.01		
13	MW-604	Groundwater	DIN	Iron	ug/l	108 U	101	64.9 J		572	17.6 J	27.3 J	1000 U	172	1100						
13	MW-604	Groundwater	DIN	Lead	ug/l	2 U	2 U	1 U		0.019 U	0.036 U	1.6 U	0.3 U	0.139	0.294 J	1 U	1 U	0.075 U	0.030 U		
13	MW-604	Groundwater	DIN	Magnesium	ug/l	17800	12600	30500		15800	9130	11000	5830	5280	6800						
13	MW-604	Groundwater	DIN	Manganese	ug/l	56.9	29.7	38.3		14.9	3.5 J	5.1 J	10 U	1.12	6.75						
13	MW-604	Groundwater	DIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ		0.1 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U		
13	MW-604	Groundwater	DIN	Nickel	ug/l	5 U	9.4 J	5 U		3.6 U	1.1 U	0.7 U	1 U	0.252	0.545	2 U	0.413 J	0.65 J	0.43 J		
13	MW-604	Groundwater	DIN	Potassium	ug/l	8050	5970	18400 J		8030	8190	12200 J	7630	7280	7900						
13	MW-604	Groundwater	DIN	Selenium	ug/l	3 U	3 U	2 U		2.1 J	3.5	1.1 U	2.5 U	1.21	2.13	1.75	2 U	2.0 UJ	6.0 J		
13	MW-604	Groundwater	DIN	Silver	ug/l	5 U	5 U	5 U		3 U	0.5 U	7 U	1 U	0.1 U	0.1 U	1 U	1 U	0.085 U	0.030 U		
13	MW-604	Groundwater	DIN	Sodium	ug/l	109000	43200	316000		135000	91600	116000 J		149000	150000						
13	MW-604	Groundwater	DIN	Thallium	ug/l	3 UJ	3 U	2 U		0.008 U	0.012 U	3.5 U	0.5 U	0.05 U	0.0912 J	1 U	1 U	0.044 U	0.020 U		
13	MW-604	Groundwater	DIN	Vanadium	ug/l	5 U	5 U	5 U		2 U	0.9 J	0.5 J	10 U	5 U	13.8						
13	MW-604	Groundwater	DIN	Zinc	ug/l	110	30.4	5 U		4.8 J	2.8 J	5.1 U	21.7	5.51	2.77	5 U	3.76 J	5.0 UJ	2.30 J		
13	MW-604	Groundwater	P/A	4,4-DDD	ug/l	0.02 U	0.02 U	0.02 U		0.023 U	0.02 U	0.02 U	0.037 U	0.021 U							
13	MW-604	Groundwater	P/A	4,4-DDE	ug/l	0.02 U	0.02 U	0.02 U		0.023 U	0.02 U	0.02 U	0.037 U	0.021 U							
13	MW-604	Groundwater	P/A	4,4-DDT	ug/l	0.02 U	0.02 U	0.02 U		0.023 U	0.02 U	0.02 U	0.037 U	0.021 U							
13	MW-604	Groundwater	P/A	Aldrin	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U	0.01 U	0.0098 U	0.037 U	0.0093 U							
13	MW-604	Groundwater	P/A	alpha-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U	0.01 U	0.0098 U	0.037 U	0.011 U							
13	MW-604	Groundwater	P/A	alpha-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U	0.01 U	0.0098 U	0.037 U	0.011 U							

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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-604	Groundwater	P/A	Aroclor 1016	ug/l	0.2 U	0.2 U	0.2 U		0.23 U	0.2 U	0.2 U	0.123 U	0.53 U							
13	MW-604	Groundwater	P/A	Aroclor 1221	ug/l	0.4 U	0.4 U	0.4 U		0.46 U	0.4 U	0.39 U	0.123 U	0.53 U							
13	MW-604	Groundwater	P/A	Aroclor 1232	ug/l	0.2 U	0.2 U	0.2 U		0.23 U	0.2 U	0.2 U	0.123 U	0.53 U							
13	MW-604	Groundwater	P/A	Aroclor 1242	ug/l	0.2 U	0.2 U	0.2 U		0.23 U	0.2 U	0.2 U	0.123 U	0.53 U							
13	MW-604	Groundwater	P/A	Aroclor 1248	ug/l	0.2 U	0.2 U	0.2 U		0.23 U	0.2 U	0.2 U	0.123 U	0.53 U							
13	MW-604	Groundwater	P/A	Aroclor 1254	ug/l	0.2 U	0.2 U	0.2 U		0.23 U	0.2 U	0.2 U	0.123 U	0.53 U							
13	MW-604	Groundwater	P/A	Aroclor 1260	ug/l	0.2 U	0.2 U	0.2 U		0.23 U	0.2 U	0.2 U	0.123 U	0.53 U							
13	MW-604	Groundwater	P/A	beta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U	0.01 U	0.0098 U	0.037 U	0.013 U							
13	MW-604	Groundwater	P/A	Chlordane	ug/l									0.011 U							
13	MW-604	Groundwater	P/A	Chlordane (total)	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U											
13	MW-604	Groundwater	P/A	DDT (total)	ug/l	0.02 U	0.02 U	0.02 U		0.023 U											
13	MW-604	Groundwater	P/A	delta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U	0.01 U	0.0098 U	0.037 U	0.011 U							
13	MW-604	Groundwater	P/A	Dieldrin	ug/l	0.02 U	0.02 U	0.02 U		0.023 U	0.02 U	0.02 U	0.037 U	0.021 U							
13	MW-604	Groundwater	P/A	Endosulfan (total)	ug/l	0.02 U	0.02 U	0.02 U		0.023 U											
13	MW-604	Groundwater	P/A	Endosulfan I	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U	0.01 U	0.0098 U	0.037 U	0.021 U							
13	MW-604	Groundwater	P/A	Endosulfan II	ug/l	0.02 U	0.02 U	0.02 U		0.023 U	0.02 U	0.02 U	0.037 U	0.021 U							
13	MW-604	Groundwater	P/A	Endosulfan sulfate	ug/l	0.02 U	0.02 U	0.02 U		0.023 U	0.02 U	0.02 U	0.037 U	0.021 U							
13	MW-604	Groundwater	P/A	Endrin	ug/l	0.02 U	0.02 U	0.02 U		0.023 U	0.02 U	0.02 U	0.037 U	0.021 U							
13	MW-604	Groundwater	P/A	Endrin Aldehyde	ug/l	0.02 U	0.02 U	0.02 U		0.023 U	0.02 U	0.02 U	0.037 U	0.022 U							
13	MW-604	Groundwater	P/A	Endrin ketone	ug/l	0.02 U	0.02 U	0.02 U		0.023 U	0.02 U	0.02 U	0.037 U								
13	MW-604	Groundwater	P/A	gamma-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U	0.01 U	0.0098 U	0.037 U	0.011 U							
13	MW-604	Groundwater	P/A	Heptachlor	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U	0.01 U	0.0098 U	0.037 U	0.019 U							
13	MW-604	Groundwater	P/A	Heptachlor epoxide	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U	0.01 U	0.0098 U	0.037 U	0.0089 U							
13	MW-604	Groundwater	P/A	Lindane	ug/l	0.01 U	0.01 U	0.01 U		0.0115 U	0.01 U	0.0098 U	0.037 U	0.011 U							
13	MW-604	Groundwater	P/A	Methoxychlor	ug/l	0.1 U	0.1 UJ	0.1 UJ		0.115 U	0.1 U	0.098 U	0.037 U	0.053 U							
13	MW-604	Groundwater	P/A	PCB (Sum Detect + .5 NonDetect)	ug/l	0.4 U	0.4 U	0.4 U		0.46 U											
13	MW-604	Groundwater	P/A	Toxaphene	ug/l	1 U	1 U	1 U		1.15 U	1 U	0.98 U	3.1 U	0.53 U							
13	MW-604	Groundwater	SVOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				5 U	29 U		5.1 U						
13	MW-604	Groundwater	SVOA	1,2-Dichlorobenzene	ug/l							5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	1,3-Dichlorobenzene	ug/l							5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	1,4-Dichlorobenzene	ug/l							5 U	23 U								
13	MW-604	Groundwater	SVOA	2,2-oxybis(1-Chloropropane)	ug/l	1 U	1 U	1 UJ		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	2,4,5-Trichlorophenol	ug/l	5 U	5 U	5 U		23 U	20 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	2,4,6-Trichlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	2,4-Dichlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	2,4-Dimethylphenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		26 U						
13	MW-604	Groundwater	SVOA	2,4-Dinitrophenol	ug/l	5 U	5 U	5 U		23 U	20 U	10 U	210 U		100 U						
13	MW-604	Groundwater	SVOA	2,4-Dinitrotoluene	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	2,6-Dinitrotoluene	ug/l	2 U	1 U	2 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	2-Chloronaphthalene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	29 U		10 U						
13	MW-604	Groundwater	SVOA	2-Chlorophenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	2-Methylnaphthalene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	29 U	0.051 U	0.053 U					0.020 U	
13	MW-604	Groundwater	SVOA	2-Methylphenol	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	2-Nitroaniline	ug/l	5 U	5 U	5 UJ		23 U	20 U	5 U	23 U		100 U						
13	MW-604	Groundwater	SVOA	2-Nitrophenol	ug/l	2 U	1 U	2 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	3,3-Dichlorobenzidine	ug/l	5 UJ	1 U	1 U		6 U	5 U	5 U	23 U		20 U						
13	MW-604	Groundwater	SVOA	3-Nitroaniline	ug/l	5 U	5 U	5 U		23 U	20 U	5 U	23 U		51 U						
13	MW-604	Groundwater	SVOA	4,6-Dinitro-2-methylphenol	ug/l	5 U	5 U	5 U		23 U	20 U	5 U	210 U		26 U						
13	MW-604	Groundwater	SVOA	4-Bromophenyl-phenylether	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	4-Chloro-3-methylphenol	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	4-Chloroaniline	ug/l	2 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	4-Chlorophenyl methylsulfone	ug/l										20 U						
13	MW-604	Groundwater	SVOA	4-Chlorophenyl-phenylether	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	4-Methylphenol	ug/l	2 U	1 U	1 U		6 U	5 U	5 U			5.1 U						
13	MW-604	Groundwater	SVOA	4-Nitroaniline	ug/l	5 U	5 U	5 U		23 U	20 U	5 U	23 U		51 U						
13	MW-604	Groundwater	SVOA	4-Nitrophenol	ug/l	5 U	5 U	5 UJ		23 U	20 U	5 U	160 U		100 U						
13	MW-604	Groundwater	SVOA	Acenaphthene	ug/l	1 U	1 U	0.5 U		1.1 U	1 U	0.97 U	29 U	0.051 U	0.053 U	0.1 U				0.020 U	

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-604	Groundwater	SVOA	Acenaphthylene	ug/l	1 U	1 U	0.5 U		1.1 U	2 U	1.9 U	23 U	0.051 U	0.053 U					0.020 U	
13	MW-604	Groundwater	SVOA	Aniline	ug/l								23 U		5.1 U						
13	MW-604	Groundwater	SVOA	Anthracene	ug/l	0.66 U	0.1 U	0.5 U		0.11 U	0.1 U	0.097 U	23 U	0.31 U	0.32 U	0.1 U				0.020 U	
13	MW-604	Groundwater	SVOA	Azobenzene	ug/l								230 U								
13	MW-604	Groundwater	SVOA	Benzidine	ug/l										200 U						
13	MW-604	Groundwater	SVOA	Benzo(a)anthracene	ug/l	0.01 U	0.2 U	0.01 U		0.11 U	0.1 U	0.097 U	23 U	0.051 U	0.053 U					0.020 U	
13	MW-604	Groundwater	SVOA	Benzo(a)pyrene	ug/l	0.02 U	0.25 U	0.02 U		0.11 U	0.1 U	0.097 U	23 U	0.064 U	0.067 U	0.1 U				0.020 U	
13	MW-604	Groundwater	SVOA	Benzo(b)fluoranthene	ug/l	0.02 U	1 U	0.02 U		0.11 U	0.2 U	0.19 U	23 U	0.051 U	0.053 U	0.1 U				0.020 U	
13	MW-604	Groundwater	SVOA	Benzo(g,h,i)perylene	ug/l	0.08 U	0.75 U	0.08 UJ		0.11 U	0.2 U	0.19 U	29 U	0.092 U	0.053 U	0.1 U				0.020 U	
13	MW-604	Groundwater	SVOA	Benzo(k)fluoranthene	ug/l	0.02 U	0.3 U	0.02 UJ		0.11 U	0.1 U	0.097 U	29 U	0.1 U	0.053 U	0.1 U				0.020 U	
13	MW-604	Groundwater	SVOA	Benzofluoranthenes (total)	ug/l	0.02 U	1 U	0.02 U		0.11 U											
13	MW-604	Groundwater	SVOA	Benzoic acid	ug/l								58 U		130 U						
13	MW-604	Groundwater	SVOA	Benzyl alcohol	ug/l								23 U		10 U						
13	MW-604	Groundwater	SVOA	bis(2-Chloroethoxy)methane	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	29 U		5.1 U						
13	MW-604	Groundwater	SVOA	bis(2-Chloroethyl)ether	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	bis(2-Ethylhexyl)adipate												10 U					
13	MW-604	Groundwater	SVOA	bis(2-Ethylhexyl)phthalate	ug/l	9	1 U	1 UJ		6 U	0.52 J	4 J	23 U		5.1 U	0.5 U		0.49 U		0.19 J	
13	MW-604	Groundwater	SVOA	Butylbenzylphthalate	ug/l	1 U	1 U	1 UJ		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	Carbazole	ug/l							5 U									
13	MW-604	Groundwater	SVOA	Chrysene	ug/l	0.15 U	0.2 U	0.15 U		0.054 U	0.1 U	0.097 U	23 U	0.051 U	0.053 U					0.020 U	
13	MW-604	Groundwater	SVOA	CPAH (total)	ug/l	0.15 U	1 U	0.15 U		0.54 U											
13	MW-604	Groundwater	SVOA	Dibenz(a,h)anthracene	ug/l	0.03 U	1 U	0.03 U		0.54 U	0.2 U	0.19 U	29 U	0.15 U	0.053 U					0.020 U	
13	MW-604	Groundwater	SVOA	Dibenzofuran	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	Diethylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	Dimethylphthalate	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	Di-n-butylphthalate	ug/l	1 U	1 U	1 UJ		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	Di-n-octylphthalate	ug/l	1 U	1 U	1 UJ		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	Fluoranthene	ug/l	0.21 U	0.5 U	0.21 UJ		0.54 U	0.2 U	0.19 U	23 U	0.051 U	0.053 U	0.1 U				0.020 U	
13	MW-604	Groundwater	SVOA	Fluorene	ug/l	0.21 U	0.5 U	0.21 UJ		0.11 U	0.1 U	0.097 U	23 U	0.12 U	0.053 U	0.1 U				0.020 U	
13	MW-604	Groundwater	SVOA	Hexachlorobenzene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U	5 U					
13	MW-604	Groundwater	SVOA	Hexachlorobutadiene	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	35 U		5.1 U						
13	MW-604	Groundwater	SVOA	Hexachlorocyclopentadiene	ug/l	2 U	1 U	1 U		6 U	5 U	5 U	35 U		10 U	10 UJ					
13	MW-604	Groundwater	SVOA	Hexachloroethane	ug/l	1 U	1 U	2 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	HPAH (total)	ug/l	0.27 U	1 U	0.27 U		0.54 U											
13	MW-604	Groundwater	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.04 U	0.3 U	0.04 U		0.11 U	0.1 U	0.097 U	23 U	0.2 U	0.053 U					0.020 U	
13	MW-604	Groundwater	SVOA	Isophorone	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	29 U		5.1 U						
13	MW-604	Groundwater	SVOA	LPAH (total)	ug/l	1 U	1 U	0.5 U		2.2 U											
13	MW-604	Groundwater	SVOA	m,p-Cresols	ug/l								23 U								
13	MW-604	Groundwater	SVOA	Naphthalene	ug/l	1 U	1 U	0.5 UJ		2.2 U	1 U	0.97 U	23 U	0.24 U	0.26 U	0.1 U				0.020 U	
13	MW-604	Groundwater	SVOA	NCPAH (total)	ug/l	1 U	1 U	1 U		6 U											
13	MW-604	Groundwater	SVOA	Nitrobenzene	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	N-Nitrosodimethylamine	ug/l								23 U								
13	MW-604	Groundwater	SVOA	N-Nitrosodinpropylamine	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		5.1 U						
13	MW-604	Groundwater	SVOA	N-Nitrosodiphenylamine	ug/l	1 U	1 U	1 U		6 U	5 U	5 U	23 U		10 U						
13	MW-604	Groundwater	SVOA	Pentachlorophenol	ug/l	5 U	5 U	5 U		23 U	20 U	5 U	160 U		5.1 U	1 U					
13	MW-604	Groundwater	SVOA	Phenanthrene	ug/l	0.64 U	0.25 U	0.5 U		0.11 U	0.1 U	0.097 U	23 U	0.051 U	0.053 U					0.020 U	
13	MW-604	Groundwater	SVOA	Phenol	ug/l	1 U	1 U	1 UJ		6 U	5 U	5 U	12 U		5.1 U						
13	MW-604	Groundwater	SVOA	Pyrene	ug/l	0.27 U	0.1 U	0.27 UJ		0.11 U	0.1 U	0.097 U	23 U	0.051 U	0.053 U	0.1 U				0.020 U	
13	MW-604	Groundwater	TIN	Aluminum	ug/l	237 UJ	147	50 U	210	34.8 J	134	152 J	37.2	45.7	56.2						
13	MW-604	Groundwater	TIN	Antimony	ug/l	5 U	5 U	5 U	5 U	0.27 J	0.55 J	1.6 U	1 U	0.665	0.884	0.4 J	0.585 J	0.67 UJ	1.09		
13	MW-604	Groundwater	TIN	Arsenic	ug/l	2 UJ	2 J	2 U	2 U	0.59 J	2.3	2.9 U	5 U	1.58	1.3	3.11	3.62	0.71 J	2.75	2.91	6.48
13	MW-604	Groundwater	TIN	Barium	ug/l	7.2 J	5 U	6 J	3	3.5 J	1.4 J	2 J	3 U	1.92	1.22	4.21	3.71	2.2 J		3.13	5.10
13	MW-604	Groundwater	TIN	Beryllium	ug/l	1 U	1 U	1 U	0.26 U	0.33 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U		
13	MW-604	Groundwater	TIN	Cadmium	ug/l	1 U	1 U	1 U	0.057 UJ	0.047 U	0.053 U	0.3 U	2 U	0.2 U	0.2 U	1 UJ	0.1 U	0.094 U	0.024 J		
13	MW-604	Groundwater	TIN	Calcium	ug/l	24200	21500	35500	18900	13700	13800	11700	7030	4370							
13	MW-604	Groundwater	TIN	Chromium	ug/l	5 U	5 U	5 U	4 UJ	6.4 U	1.5 J	0.6 J	6 U	0.252	0.373 J	1 UJ	1 U	1.0 U	0.97 J		
13	MW-604	Groundwater	TIN	Cobalt	ug/l	5 U	5 U	5 U	4 U	2.9 U	0.27 J	0.5 U	0.8 U	0.1 U	0.1 U						

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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-604	Groundwater	TIN	Copper	ug/l	2 U	2 U	2 U	4 UJ	2.1 U	1.2 J	1.1 U	6 U	2.09	0.5 U	4.35	1.89 J	3.7	2.01		
13	MW-604	Groundwater	TIN	Iron	ug/l	218 UJ	123	114	100 U	572	428	301	1000 U	1450							
13	MW-604	Groundwater	TIN	Lead	ug/l	2 U	2 U	1 U	2 U	0.019 U	0.21 J	1.6 U	2 U	0.373	0.15 U	1 U	1 U	0.075 U	0.030 U		
13	MW-604	Groundwater	TIN	Magnesium	ug/l	17800	12700	31400	15700	15800	9140	10800	5690	5240							
13	MW-604	Groundwater	TIN	Manganese	ug/l	59	29	39.1	8.8 J	14.9	3.8 J	5.5 J	4 U	2.81	4.2						
13	MW-604	Groundwater	TIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ	0.1 U	0.12 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U		
13	MW-604	Groundwater	TIN	Nickel	ug/l	5 U	5 U	5 U	4 U	3.6 U	1.1 U	0.7 U	2 U	0.5 U	0.5 U	2.73 U	2 U	0.43 J	0.16 J		
13	MW-604	Groundwater	TIN	Potassium	ug/l	8080	5840	18300 J	6190	8030	8070	11800 J	7770	6940							
13	MW-604	Groundwater	TIN	Selenium	ug/l	3 U	3 U	2 U	3 U	2 J	3.2	1.1 J	5 U	1.62	1.35	4.28	2 U	1.4 UJ	7.8 J		
13	MW-604	Groundwater	TIN	Silver	ug/l	5 U	5 U	5 U	4 U	3 U	0.5 U	0.7 U	2 U	0.35 U	1.32 J	1 U	1 U	0.085 U	0.030 U		
13	MW-604	Groundwater	TIN	Sodium	ug/l	110000	41100	320000	89200	135000	89800	117000 J		156000							
13	MW-604	Groundwater	TIN	Thallium	ug/l	3 UJ	3 UJ	2 U	10 U	0.008 U	0.012 U	3.5 U	1 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U		
13	MW-604	Groundwater	TIN	Vanadium	ug/l	5 U	5 U	5 U	3 UJ	2 U	1.7 J	0.7 J	20 U	2.66	2.77						
13	MW-604	Groundwater	TIN	Zinc	ug/l	129	5 U	5 U	26.9 U	4.8	2.6 J	12.6 J	25 U	6.25	1.06	5.01 U	5 U	5.0 U	1.14 J		
13	MW-604	Groundwater	VOA	1,1,1,2-Tetrachloroethane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	0.13 J	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	1,1,2-Trichlorotrifluoroethane	ug/l									2 U	2 U						
13	MW-604	Groundwater	VOA	1,1-Dichloroethane	ug/l	1 UJ	1 U	1 U	1 U	0.14 J	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	1,1-Dichloroethene	ug/l	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	1,1-Dichloropropene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	1,2,3-Trichlorobenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	1,2,3-Trichloropropane	ug/l								2 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	1,2,4-Trichlorobenzene	ug/l					1 U	1 U		2 U	2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW-604	Groundwater	VOA	1,2,4-Trimethylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		2.5 U	10 U	10 U	5 UJ		1.0 U		2.0 U	
13	MW-604	Groundwater	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		2.0 U	
13	MW-604	Groundwater	VOA	1,2-Dichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	1,3,5-Trimethylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	1,3-Dichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.10 J	
13	MW-604	Groundwater	VOA	1,3-Dichloropropane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U											
13	MW-604	Groundwater	VOA	1,4-Dichlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	2,2-Dichloropropane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	2-Butanone	ug/l	5 U	5 U	5 U		5 U	5 U	5 U	50 U	50 U	50 U	10 UJ		5.0 U			
13	MW-604	Groundwater	VOA	2-Chloroethyl vinyl ether	ug/l								10 U	10 U	10 U						
13	MW-604	Groundwater	VOA	2-Chlorotoluene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	20 U	20 U	10 UJ		5.0 U			
13	MW-604	Groundwater	VOA	4-Chlorotoluene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	4-Isopropyltoluene	ug/l								1 U	2 U	2 U	2 UJ		1.0 U			
13	MW-604	Groundwater	VOA	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	20 U	20 U	5 UJ		5.0 U			
13	MW-604	Groundwater	VOA	Acetone	ug/l	5 U	5 U	5 U		5 U	5 U	5 U		50 U	50 U	25 UJ		5.0 U		20 UJ	
13	MW-604	Groundwater	VOA	Acrylonitrile	ug/l									10 U	10 U						
13	MW-604	Groundwater	VOA	Benzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U	0.5 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	Bromobenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Bromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	5 U	5 U	5 UJ		1.0 U			
13	MW-604	Groundwater	VOA	BTEX (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U											
13	MW-604	Groundwater	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	2 U	10 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	Chlorobenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 UJ		1.0 U		0.50 U	

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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-604	Groundwater	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Chloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	cis-1,2-Dichloroethene	ug/l	0.65 J	1.1	0.36 J	1 U	1.2	0.62 J	0.6 J	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Dibromomethane	ug/l								2 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Dichlorodifluoromethane	ug/l							1 U	1 U	5 U	5 U	5 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Ethylbenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	Hexachlorobutadiene	ug/l								2 U	2 U	2 U	4 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Iodomethane	ug/l									5 U	5 U						
13	MW-604	Groundwater	VOA	Isopropylbenzene	ug/l								1 U	2 U	2 U	2 UJ		1.0 U			
13	MW-604	Groundwater	VOA	m,p-Xylene	ug/l	0.2 U	0.2 U	0.2 U				1 U		2 U	0.65 J	2 UJ		2.0 U		0.50 U	
13	MW-604	Groundwater	VOA	Methyl Tert-Butyl Ether	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Methylene chloride	ug/l	2 U	1 U	1 U	2 U	2 U	2 U	1 U	5 U	5 U	1.2 U	5 UJ		1.0 U		2.0 U	
13	MW-604	Groundwater	VOA	m-Xylene	ug/l					0.4 U											
13	MW-604	Groundwater	VOA	Naphthalene	ug/l								2 U	2 U	3.6	2 UJ		1.0 U			
13	MW-604	Groundwater	VOA	n-Butylbenzene	ug/l								1 U	2 U	2 U	5 UJ		1.0 U			
13	MW-604	Groundwater	VOA	n-Propylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	o-Xylene	ug/l	0.2 U	0.2 U	0.2 U		0.2 U		1 U		2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	sec-Butylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	tert-Butylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.10 J	
13	MW-604	Groundwater	VOA	Toluene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.3 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.70 U	
13	MW-604	Groundwater	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	trans-1,4-Dichloro-2-butene	ug/l									10 U	10 U						
13	MW-604	Groundwater	VOA	Trichloroethene	ug/l	2.5	3.4	1.5	1 U	3.8	1.6	0.8 J	1 U	2 U	2 U	0.36 J		1.0 U		0.21 J	
13	MW-604	Groundwater	VOA	Trichlorofluoromethane	ug/l							1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-604	Groundwater	VOA	Vinyl acetate	ug/l									5 U	5 U						
13	MW-604	Groundwater	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 UJ	1 UJ		1.0 U		0.50 U	
13	MW-604	Groundwater	VOA	Xylenes	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U		2 U							1.0 U	
13	MW-604	Groundwater	VOA	Xylenes (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	1 U										1.0 U	
13	MW-605	Groundwater	DIN	Aluminum	ug/l	50 U	50 U	50 U		27 U	186	80.6 U		4.34	3.85						
13	MW-605	Groundwater	DIN	Antimony	ug/l	7.1 J	5 U	5 U		0.046 U	0.054 J	1.6 U		0.105	0.321	1 U	1 U	0.056 U	0.09 UJ 0.05 J		
13	MW-605	Groundwater	DIN	Arsenic	ug/l	2.9 J	3.7 J	2.7		2.8	0.41 J	4.5 J		4.16	4.91	3.7	3.56 J	4.1	4.73 4.70	4.17 4.21	4.92 4.91
13	MW-605	Groundwater	DIN	Barium	ug/l	64 J	61.4	55.8		59.8	65.8	70.2 J		59.3	61.4	57.9	57.8	56.1		51.8 52.9	60.4 60.7
13	MW-605	Groundwater	DIN	Beryllium	ug/l	1 U	1 U	1 U		0.33 U	0.28	0.6 U		0.15 U	0.15 U	1 U	1 U	0.043 U	0.020 U 0.020 U		
13	MW-605	Groundwater	DIN	Cadmium	ug/l	1 U	1 U	1 U		0.047 U	2.5	0.3 U		0.2 U	0.2 U	1 U	0.1 U	0.16 J	0.020 UJ 0.020 UJ		
13	MW-605	Groundwater	DIN	Calcium	ug/l	88300	87700	87300		93500	84700	96000		89500	85000						
13	MW-605	Groundwater	DIN	Chromium	ug/l	5 U	5 U	5 U		6.4 J	1.3 J	0.7 J		0.195	3.86	1 U	1 U	1.0 U	0.71 J 0.72 J		
13	MW-605	Groundwater	DIN	Cobalt	ug/l	5.1 J	5 U	5 U		4.7 J	37	4.4 J		4.14	8.27						
13	MW-605	Groundwater	DIN	Copper	ug/l	2 U	2 U	2 U		2.1 U	1.8 J	1.1 U		0.389	0.595	2 U	2 U	2.0 U	0.46 0.47		
13	MW-605	Groundwater	DIN	Iron	ug/l	6560	6350	5380 J		6190	5730	6690		6240	7100						
13	MW-605	Groundwater	DIN	Lead	ug/l	2 U	2 U	1 U		0.019 U	0.7 J	1.6 U		0.111	0.177	1 U	1 U	0.075 U	0.030 U 0.030 U		
13	MW-605	Groundwater	DIN	Magnesium	ug/l	28100	27500	26500		27600	25900	29000		30300	27000						
13	MW-605	Groundwater	DIN	Manganese	ug/l	4220	4040	3850		3850	4110	4070		3890	3800						
13	MW-605	Groundwater	DIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ		0.1 U	0.2 U	0.2 U			0.2 U	0.545	0.2 U	0.0180 UJ	0.20 U 0.20 U		

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-605	Groundwater	DIN	Nickel	ug/l	5 U	5 U	5 U		3.6 U	1.3 J	2 J		4.39	4.17	2.15	2.17	4.6	3.66 3.78		
13	MW-605	Groundwater	DIN	Potassium	ug/l	10100	9690	10500 J		10200	9980	13500 J		9410	9000						
13	MW-605	Groundwater	DIN	Selenium	ug/l	3 U	3 U	2 U		2.2 J	1.6 J	1.7 J		0.5 U	0.892	1.61	2 U	3.6 J	1.2 J 1.3 J		
13	MW-605	Groundwater	DIN	Silver	ug/l	5 U	5 U	5 U		3 U	0.5 U	0.7 U		0.346	0.1 U	1 U	1 U	0.085 U	0.030 U 0.030 U		
13	MW-605	Groundwater	DIN	Sodium	ug/l	61200	56600	54600		62800	63800	66400 J		71600	67000						
13	MW-605	Groundwater	DIN	Thallium	ug/l	3 UJ	3 U	2 U		0.008 U	0.26 J	3.5 U		0.0521	0.118	1 U	1 U	0.044 U	0.037 0.032		
13	MW-605	Groundwater	DIN	Vanadium	ug/l	5 U	5 U	5 U		2.8 J	1.2 J	1.1 J		5 U	5 U						
13	MW-605	Groundwater	DIN	Zinc	ug/l	5 U	6.5 J	5 U		4.5 J	2.4 J	5.1 U		11	2.31	1.92 UJ	1.52 J	5.0 UJ	2.35 J 2.12 J		
13	MW-605	Groundwater	P/A	4,4-DDD	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.021 U	0.037 U	0.0206 U							
13	MW-605	Groundwater	P/A	4,4-DDE	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.021 U	0.037 U	0.0206 U							
13	MW-605	Groundwater	P/A	4,4-DDT	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.021 U	0.037 U	0.0206 U							
13	MW-605	Groundwater	P/A	Aldrin	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.037 U	0.00909 U							
13	MW-605	Groundwater	P/A	alpha-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.037 U	0.0109 U							
13	MW-605	Groundwater	P/A	alpha-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.037 U	0.0103 U							
13	MW-605	Groundwater	P/A	Aroclor 1016	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.21 U		0.52 U							
13	MW-605	Groundwater	P/A	Aroclor 1221	ug/l	0.4 U	0.4 U	0.4 U		0.4 U	0.4 U	0.41 U		0.52 U							
13	MW-605	Groundwater	P/A	Aroclor 1232	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.21 U		0.52 U							
13	MW-605	Groundwater	P/A	Aroclor 1242	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.21 U		0.52 U							
13	MW-605	Groundwater	P/A	Aroclor 1248	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.21 U		0.52 U							
13	MW-605	Groundwater	P/A	Aroclor 1254	ug/l	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.21 U		0.52 U							
13	MW-605	Groundwater	P/A	Aroclor 1260	ug/l	0.2 U	0.2 U	0.2 U			0.2 U	0.21 U		0.52 U							
13	MW-605	Groundwater	P/A	beta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.037 U	0.0123 U							
13	MW-605	Groundwater	P/A	Chlordane	ug/l									0.0103 U							
13	MW-605	Groundwater	P/A	Chlordane (total)	ug/l	0.01 U	0.01 U	0.01 U		0.01 U											
13	MW-605	Groundwater	P/A	DDT (total)	ug/l	0.02 U	0.02 U	0.02 U		0.02 U											
13	MW-605	Groundwater	P/A	delta-BHC	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.037 U	0.0104 U							
13	MW-605	Groundwater	P/A	Dieldrin	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.021 U	0.037 U	0.0206 U							
13	MW-605	Groundwater	P/A	Endosulfan (total)	ug/l	0.02 U	0.02 U	0.02 U		0.02 U											
13	MW-605	Groundwater	P/A	Endosulfan I	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.037 U	0.0206 U							
13	MW-605	Groundwater	P/A	Endosulfan II	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.021 U	0.037 U	0.0206 U							
13	MW-605	Groundwater	P/A	Endosulfan sulfate	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.021 U	0.037 U	0.0206 U							
13	MW-605	Groundwater	P/A	Endrin	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.021 U	0.037 U	0.0206 U							
13	MW-605	Groundwater	P/A	Endrin Aldehyde	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.021 U	0.037 U	0.0214 U							
13	MW-605	Groundwater	P/A	Endrin ketone	ug/l	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.021 U	0.037 U								
13	MW-605	Groundwater	P/A	gamma-Chlordane	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.037 U	0.0103 U							
13	MW-605	Groundwater	P/A	Heptachlor	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.037 U	0.0189 U							
13	MW-605	Groundwater	P/A	Heptachlor epoxide	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.037 U	0.00869 U							
13	MW-605	Groundwater	P/A	Lindane	ug/l	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.037 U	0.0103 U							
13	MW-605	Groundwater	P/A	Methoxychlor	ug/l	0.1 U	0.1 UJ	0.1 UJ		0.1 U	0.1 U	0.1 U	0.037 U	0.0516 U							
13	MW-605	Groundwater	P/A	PCB (Sum Detect + .5 NonDetect)	ug/l	0.4 U	0.4 U	0.4 U		0.4 U											
13	MW-605	Groundwater	P/A	Toxaphene	ug/l	1 U	1 U	1 U		1 U	1 U	1 U	3 U	0.515 U							
13	MW-605	Groundwater	SVOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				5 U	28 U		5.3 U						
13	MW-605	Groundwater	SVOA	1,2-Dichlorobenzene	ug/l							5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	1,3-Dichlorobenzene	ug/l							5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	1,4-Dichlorobenzene	ug/l							3 J	22 U								
13	MW-605	Groundwater	SVOA	2,2-oxybis(1-Chloropropane)	ug/l	1 U	1 U	1 UJ		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	2,4,5-Trichlorophenol	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	2,4,6-Trichlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	2,4-Dichlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	2,4-Dimethylphenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		27 U						
13	MW-605	Groundwater	SVOA	2,4-Dinitrophenol	ug/l	5 U	5 U	5 U		20 U	20 U	10 U	200 U		110 U						
13	MW-605	Groundwater	SVOA	2,4-Dinitrotoluene	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	22 U		5.3 U						

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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-605	Groundwater	SVOA	2,6-Dinitrotoluene	ug/l	2 U	1 U	2 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	2-Chloronaphthalene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	28 U		11 U						
13	MW-605	Groundwater	SVOA	2-Chlorophenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	2-Methylnaphthalene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	28 U	0.0521 J	0.052 UJ					0.0072 J 0.0056 J	
13	MW-605	Groundwater	SVOA	2-Methylphenol	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	2-Nitroaniline	ug/l	5 U	5 U	5 UJ		20 U	20 U	5 U	22 U		110 U						
13	MW-605	Groundwater	SVOA	2-Nitrophenol	ug/l	2 U	1 U	2 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	3,3-Dichlorobenzidine	ug/l	5 UJ	1 U	1 U		5 U	5 U	5 U	22 U		21 U						
13	MW-605	Groundwater	SVOA	3-Nitroaniline	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	22 U		53 U						
13	MW-605	Groundwater	SVOA	4,6-Dinitro-2-methylphenol	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	200 U		27 U						
13	MW-605	Groundwater	SVOA	4-Bromophenyl-phenylether	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	4-Chloro-3-methylphenol	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	4-Chloroaniline	ug/l	2 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	4-Chlorophenyl methylsulfone	ug/l										21 U						
13	MW-605	Groundwater	SVOA	4-Chlorophenyl-phenylether	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	4-Methylphenol	ug/l	2 U	1 U	1 U		5 U	5 U	5 U			5.3 U						
13	MW-605	Groundwater	SVOA	4-Nitroaniline	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	22 U		53 U						
13	MW-605	Groundwater	SVOA	4-Nitrophenol	ug/l	5 U	5 U	5 UJ		20 U	20 U	5 U	160 U		110 U						
13	MW-605	Groundwater	SVOA	Acenaphthene	ug/l	1 U	1 U	0.5 U		1 U	1 U	1 U	28 U	0.0521 U	0.052 UJ	0.1 U				0.0065 J 0.0058 J	
13	MW-605	Groundwater	SVOA	Acenaphthylene	ug/l	1 U	1 U	0.5 U		1 U	2 U	2.1 U	22 U	0.0521 U	0.052 UJ					0.020 U 0.021 U	
13	MW-605	Groundwater	SVOA	Aniline	ug/l								22 U		5.3 U						
13	MW-605	Groundwater	SVOA	Anthracene	ug/l	0.66 U	0.275	0.5 U		0.1 U	0.1 U	0.1 U	22 U	0.313 U	0.31 UJ	0.1 U				0.012 J 0.016 J	
13	MW-605	Groundwater	SVOA	Azobenzene	ug/l								220 U								
13	MW-605	Groundwater	SVOA	Benzidine	ug/l										210 U						
13	MW-605	Groundwater	SVOA	Benzo(a)anthracene	ug/l	0.01 U	0.2 U	0.01 U		0.1 U	0.1 U	0.1 U	22 U	0.0521 U	0.052 UJ					0.020 U 0.021 U	
13	MW-605	Groundwater	SVOA	Benzo(a)pyrene	ug/l	0.02 U	0.25 U	0.02 U		0.1 U	0.1 U	0.1 U	22 U	0.0656 U	0.066 UJ	0.1 U				0.020 U 0.021 U	
13	MW-605	Groundwater	SVOA	Benzo(b)fluoranthene	ug/l	0.02 U	1 U	0.02 U		0.1 U	0.2 U	0.21 U	22 U	0.0521 U	0.052 UJ	0.1 U				0.020 U 0.021 U	
13	MW-605	Groundwater	SVOA	Benzo(g,h,i)perylene	ug/l	0.08 U	0.75 U	0.08 UJ		0.1 U	0.2 U	0.21 U	28 U	0.0938 U	0.052 UJ	0.1 U				0.020 U 0.021 U	
13	MW-605	Groundwater	SVOA	Benzo(k)fluoranthene	ug/l	0.02 U	0.3 U	0.02 UJ		0.1 U	0.1 U	0.1 U	28 U	0.104 U	0.052 UJ	0.1 U				0.020 U 0.021 U	
13	MW-605	Groundwater	SVOA	Benzofluoranthenes (total)	ug/l	0.02 U	1 U	0.02 U		0.1 U											
13	MW-605	Groundwater	SVOA	Benzoic acid	ug/l								56 U		140 U						
13	MW-605	Groundwater	SVOA	Benzyl alcohol	ug/l								22 U		11 U						
13	MW-605	Groundwater	SVOA	bis(2-Chloroethoxy)methane	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	28 U		5.3 U						
13	MW-605	Groundwater	SVOA	bis(2-Chloroethyl)ether	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	bis(2-Ethylhexyl)adipate												10 U					
13	MW-605	Groundwater	SVOA	bis(2-Ethylhexyl)phthalate	ug/l	44	1 U	1 UJ		5 U	5 U	29	22 U		5.3 U	0.558 UJ		0.49 U		2.0 U 2.0 U	
13	MW-605	Groundwater	SVOA	Butylbenzylphthalate	ug/l	1 U	1 U	1 UJ		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	Carbazole	ug/l							5 U									
13	MW-605	Groundwater	SVOA	Chrysene	ug/l	0.15 U	0.2 U	0.15 U		0.05 U	0.1 U	0.1 U	22 U	0.0521 U	0.052 UJ					0.020 U 0.021 U	
13	MW-605	Groundwater	SVOA	CPAH (total)	ug/l	0.15 U	1 U	0.15 U		0.5 U											
13	MW-605	Groundwater	SVOA	Dibenz(a,h)anthracene	ug/l	0.03 U	1 U	0.03 U		0.5 U	0.2 U	0.21 U	28 U	0.156 U	0.052 UJ					0.020 U 0.021 U	
13	MW-605	Groundwater	SVOA	Dibenzofuran	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	Diethylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	Dimethylphthalate	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	Di-n-butylphthalate	ug/l	1 U	1 U	1 UJ		5 U	5 U	5 U	22 U		5.3 U						

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-605	Groundwater	SVOA	Di-n-octylphthalate	ug/l	2	1 U	1 UJ		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	Fluoranthene	ug/l	0.21 U	0.5 U	0.21 UJ		0.5 U	0.2 U	0.21 U	22 U	0.0625	0.052 UJ	0.0968 J				0.084 0.073	
13	MW-605	Groundwater	SVOA	Fluorene	ug/l	0.21 U	0.5 U	0.21 UJ		0.1 U	0.1 U	0.1 U	22 U	0.125 U	0.052 UJ	0.1 U				0.0069 J 0.0072 J	
13	MW-605	Groundwater	SVOA	Hexachlorobenzene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U	5 U					
13	MW-605	Groundwater	SVOA	Hexachlorobutadiene	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	33 U		5.3 U						
13	MW-605	Groundwater	SVOA	Hexachlorocyclopentadiene	ug/l	2 U	1 U	1 U		5 U	5 U	5 U	33 U		11 UJ	10 UJ					
13	MW-605	Groundwater	SVOA	Hexachloroethane	ug/l	1 U	1 U	2 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	HPAH (total)	ug/l	0.27 U	1 U	0.27 U		0.5 U											
13	MW-605	Groundwater	SVOA	Indeno(1,2,3-cd)pyrene	ug/l	0.04 U	0.3 U	0.04 U		0.1 U	0.1 U	0.1 U	22 U	0.208 U	0.052 UJ					0.020 U 0.021 U	
13	MW-605	Groundwater	SVOA	Isophorone	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	28 U		5.3 U						
13	MW-605	Groundwater	SVOA	LPAH (total)	ug/l	1 U	0.275	0.5 U		2 U											
13	MW-605	Groundwater	SVOA	m,p-Cresols	ug/l								22 U								
13	MW-605	Groundwater	SVOA	Naphthalene	ug/l	1 U	1 U	0.5 UJ		2 U	1 U	1 U	22 U	0.115 J	0.25 UJ	0.1 U				0.14 0.16	
13	MW-605	Groundwater	SVOA	NCPAH (total)	ug/l	1 U	0.275	1 U		5 U											
13	MW-605	Groundwater	SVOA	Nitrobenzene	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	N-Nitrosodimethylamine	ug/l								22 U								
13	MW-605	Groundwater	SVOA	N-Nitrosodinpropylamine	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		5.3 U						
13	MW-605	Groundwater	SVOA	N-Nitrosodiphenylamine	ug/l	1 U	1 U	1 U		5 U	5 U	5 U	22 U		11 U						
13	MW-605	Groundwater	SVOA	Pentachlorophenol	ug/l	5 U	5 U	5 U		20 U	20 U	5 U	160 U		5.3 U	1 U					
13	MW-605	Groundwater	SVOA	Phenanthrene	ug/l	0.64 U	0.25 U	0.5 U		0.1 U	0.1 U	0.1 U	22 U	0.0521 U	0.052 UJ					0.020 U 0.021 U	
13	MW-605	Groundwater	SVOA	Phenol	ug/l	1 U	1 U	1 UJ		5 U	5 U	5 U	11 U		5.3 U						
13	MW-605	Groundwater	SVOA	Pyrene	ug/l	0.27 U	0.1 U	0.27 UJ		0.1 U	0.1 U	0.1 U	22 U	0.0521 U	0.065	0.0912 J				0.058 0.045	
13	MW-605	Groundwater	TIN	Aluminum	ug/l	227 UJ	51 J	50 U	53400	27 U	43 U	80.6 U	876	81.8	732						
13	MW-605	Groundwater	TIN	Antimony	ug/l	5 U	5 U	5 U	5 U	0.046 U	0.23 J	1.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.25 UJ	0.09 UJ 0.09 UJ		
13	MW-605	Groundwater	TIN	Arsenic	ug/l	2.3 J	3.4 J	2.4	2 U	3.1	4.8	3.7 J	7.07	4.33	6.47	4.33	7.05	4.1	5.09 5.25	5.14 5.50	5.00 4.99
13	MW-605	Groundwater	TIN	Barium	ug/l	62.2 J	61.2	55.6	201	58.6	64.8	66.8 J	66.4	59.8	69	57.9	64.3	55.1 J		61.4 67.1	60.4 61.3
13	MW-605	Groundwater	TIN	Beryllium	ug/l	1 U	1 U	1 U	0.57 J	0.33 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U 0.020 U		
13	MW-605	Groundwater	TIN	Cadmium	ug/l	1 U	1 U	1 U	1 U	0.047 U	1.2	0.3 U	2 U	0.2 U	0.2 U	1 U	0.1 U	0.094 U	0.032 J 0.041 J		
13	MW-605	Groundwater	TIN	Calcium	ug/l	89200	87800	86600	104000	91300	89400	95300	98000	94000							
13	MW-605	Groundwater	TIN	Chromium	ug/l	5 U	5 U	5 U	26.6 J	6.4 U	0.9 J	1.6 J	9.57	0.229	0.452	1 U	1 U	1.0 U	0.86 J 1.00		
13	MW-605	Groundwater	TIN	Cobalt	ug/l	5 U	5 U	5 U	20.4	4.6 J	4.7 J	4.7 J	4.56	4.24	4.52						
13	MW-605	Groundwater	TIN	Copper	ug/l	2 U	2 U	2 U	114	2.1 U	1 J	1.1 U	6 U	0.839	2.08 J	2 U	3.54	0.91 J	1.07 1.27		
13	MW-605	Groundwater	TIN	Iron	ug/l	6720 J	6370	5370	29800	6290	6020	7690	8360	6130							
13	MW-605	Groundwater	TIN	Lead	ug/l	2 U	2 U	1 U	9.1	0.019 U	0.13 J	1.6 U	2 U	0.15 U	0.219	1 U	0.36 J	0.075 U	0.071 0.099		
13	MW-605	Groundwater	TIN	Magnesium	ug/l	28100	27700	26500	32000	27000	27000	28400	28300	29700							
13	MW-605	Groundwater	TIN	Manganese	ug/l	4250	4050	3830	4540	3860	4100	4010	3850	3960	3820						
13	MW-605	Groundwater	TIN	Mercury	ug/l	0.2 UJ	0.2 U	0.2 UJ	0.17	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.56	0.2 U	0.0180 UJ	0.20 U 0.20 U		
13	MW-605	Groundwater	TIN	Nickel	ug/l	5 U	5 U	5 U	15.1 J	3.6 U	1.8 J	2.8 J	2.67	4.16	4.75	4.29	2.52	5.0	3.69 3.77		
13	MW-605	Groundwater	TIN	Potassium	ug/l	10200	9570	10400 J	10900	9930	10300	13300 J	10100	9570							
13	MW-605	Groundwater	TIN	Selenium	ug/l	3 U	3 U	2 U	3 U	2.4 J	4.2	1.9 J	5 U	0.704	0.709	3.54	2 U	3.5	1.9 J 1.8 J		

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-605	Groundwater	TIN	Silver	ug/l	5 U	5 U	5 U	4 U	3 U	0.5 U	0.7 U	2 U	0.35 U	0.41	0.06 UJ	1 U	0.085 U	0.030 U 0.030 U		
13	MW-605	Groundwater	TIN	Sodium	ug/l	61000	55700	54400	61500	61600	64900	64500 J		65100							
13	MW-605	Groundwater	TIN	Thallium	ug/l	3 UJ	3 UJ	2 U	10 U	1.1 J	1 J	3.5 U	1 U	0.25 U	0.25 U	1 U	0.077 J	0.044 U	0.044 0.046		
13	MW-605	Groundwater	TIN	Vanadium	ug/l	5 U	5 U	5 U	90.3	2 U	1.5 J	1.2 J	20 U	1.57	3.24						
13	MW-605	Groundwater	TIN	Zinc	ug/l	5 U	5 U	5 U	86.8	4.3 J	2.4 J	17.6 J	25 U	7.71	3.03	5 UJ	3.04 J	5.0 U	1.21 J 3.82		
13	MW-605	Groundwater	VOA	1,1,1,2-Tetrachloroethane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	1,1,2-Trichlorotrifluoroethane	ug/l									2 U	2 U						
13	MW-605	Groundwater	VOA	1,1-Dichloroethane	ug/l	6 J	2.5	6 J	5.2	4.6	3.2	3.1	2.24	2.1	2	1.93 J		2.4		1.9 1.9	
13	MW-605	Groundwater	VOA	1,1-Dichloroethene	ug/l	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	1,1-Dichloropropene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	1,2,3-Trichlorobenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	1,2,3-Trichloropropane	ug/l								2 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	1,2,4-Trichlorobenzene	ug/l					0.16 J	1 U		2 U	2 U	2 U	1 UJ		1.0 U		2.0 U 2.0 U	
13	MW-605	Groundwater	VOA	1,2,4-Trimethylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		2.5 U	10 U	10 U	5 UJ		1.0 U		2.0 U 2.0 U	
13	MW-605	Groundwater	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U		2.0 U 2.0 U	
13	MW-605	Groundwater	VOA	1,2-Dichlorobenzene	ug/l	0.45	0.2 U	0.51	1 U	0.46 J	0.62 J		1 U	2 U	2 U	0.28 J		1.0 U		0.37 J 0.38 J	
13	MW-605	Groundwater	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	0.2 J	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	1,3,5-Trimethylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	1,3-Dichlorobenzene	ug/l	1.7	0.69	2	2.1	1.9	2.2		1.53	1.4 J	1.1 J	1.35 J		1.6		1.2 1.2	
13	MW-605	Groundwater	VOA	1,3-Dichloropropane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U											
13	MW-605	Groundwater	VOA	1,4-Dichlorobenzene	ug/l	12	4.4	13	13	11	11		6.21	5.4	4.7	5.1 J		5.0		3.8 3.8	
13	MW-605	Groundwater	VOA	2,2-Dichloropropane	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	2-Butanone	ug/l	5 U	5 U	5 U		5 U	5 U	5 U	50 U	50 U	50 U	10 UJ		5.0 U			
13	MW-605	Groundwater	VOA	2-Chloroethyl vinyl ether	ug/l								10 U	10 U	10 U						
13	MW-605	Groundwater	VOA	2-Chlorotoluene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	20 U	20 U	10 UJ		5.0 U			
13	MW-605	Groundwater	VOA	4-Chlorotoluene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	4-Isopropyltoluene	ug/l								1 U	2 U	2 U	2 UJ		1.0 U			
13	MW-605	Groundwater	VOA	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	20 U	20 U	5 UJ		5.0 U			
13	MW-605	Groundwater	VOA	Acetone	ug/l	5 U	4.6 J	5 U		5 U	5 U	5 U		50 U	4.2 J	25 UJ		5.0 U		20 UJ 20 UJ	
13	MW-605	Groundwater	VOA	Acrylonitrile	ug/l									10 U	10 U						
13	MW-605	Groundwater	VOA	Benzene	ug/l	0.69	0.29	0.74	0.96 J	1	0.76 J	0.5 J	0.54	0.54 J	0.42 J	0.64 J		0.50 J		0.56 0.56	
13	MW-605	Groundwater	VOA	Bromobenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Bromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U		1 U	2 U	2 U	1 UJ		1.0 U			

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Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-605	Groundwater	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	5 U	5 U	5 UJ		1.0 U			
13	MW-605	Groundwater	VOA	BTEX (total)	ug/l	0.93	0.29	0.74	0.96	1											
13	MW-605	Groundwater	VOA	Carbon disulfide	ug/l	0.24 J	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	2 U	10 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	Chlorobenzene	ug/l	12	4.4	17	17	20	22	18	17.5	18	17	18 J		24		25 25	
13	MW-605	Groundwater	VOA	Chloroethane	ug/l	4.8	1.4	6.4	6	5.2	4.5	5.2	3.42	3.6 J	4.7 J	4.43 J		7.9		5.7 5.5	
13	MW-605	Groundwater	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Chloromethane	ug/l	1 U	1 U	1 U	3.7	1 U	1 U	1 U	1 U	5 U	5 U	5 UJ		1.0 UJ		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	cis-1,2-Dichloroethene	ug/l	0.72 J	0.24 J	0.66 J	0.77 J	0.78 J	0.87 J	0.8 J	1 U	0.65 J	2 U	0.52 J		1.0 U		0.48 J 0.46 J	
13	MW-605	Groundwater	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Dibromomethane	ug/l								2 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Dichlorodifluoromethane	ug/l							0.6 J	1 U	5 U	5 U	1.21 J		1.6 J			
13	MW-605	Groundwater	VOA	Ethylbenzene	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	Hexachlorobutadiene	ug/l								2 U	2 U	2 U	4 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Iodomethane	ug/l									5 U	5 U						
13	MW-605	Groundwater	VOA	Isopropylbenzene	ug/l								1 U	2 U	2 U	2 UJ		1.0 U			
13	MW-605	Groundwater	VOA	m,p-Xylene	ug/l	0.2 U	0.2 U	0.2 U				1 U		2 U	2 U	2 UJ		2.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	Methyl Tert-Butyl Ether	ug/l									2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Methylene chloride	ug/l	2 U	1 U	1 U	2 U	0.15 J	2 U	1 U	5 U	5 U	0.57 J	5 UJ		1.0 U		0.11 J 2.0 U	
13	MW-605	Groundwater	VOA	m-Xylene	ug/l					0.4 U											
13	MW-605	Groundwater	VOA	Naphthalene	ug/l								2 U	2 U	2 U	2 UJ		1.0 U			
13	MW-605	Groundwater	VOA	n-Butylbenzene	ug/l								1 U	2 U	2 U	5 UJ		1.0 U			
13	MW-605	Groundwater	VOA	n-Propylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	o-Xylene	ug/l	0.2 U	0.2 U	0.2 U		0.2 U		1 U		2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	sec-Butylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	tert-Butylbenzene	ug/l								1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	Toluene	ug/l	0.24	0.2 U	0.2 U	1 U	0.3 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.84 U 1.0 U	
13	MW-605	Groundwater	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	0.11 J	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	trans-1,4-Dichloro-2-butene	ug/l									10 U	10 U						
13	MW-605	Groundwater	VOA	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	Trichlorofluoromethane	ug/l							1 U	1 U	2 U	2 U	1 UJ		1.0 U			
13	MW-605	Groundwater	VOA	Vinyl acetate	ug/l									5 U	5 U						
13	MW-605	Groundwater	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	0.11 J	1 U	1 U	2 U	2 U	2 UJ	1 UJ		1.0 U		0.50 U 0.50 U	
13	MW-605	Groundwater	VOA	Xylenes	ug/l	0.2 U	0.2 U	0.2 U	1 U		1 U		2 U							1.0 U 1.0 U	

Table C-2-C
Summary of Chemicals for Groundwater at Metals Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						7/1996	11/1996	5/1997	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2010
13	MW-605	Groundwater	VOA	Xylenes (total)	ug/l	0.2 U	0.2 U	0.2 U	1 U	0.4 U										1.0 U 1.0 U	

Notes:

Blank cells in the concentration columns indicate that a sample was not collected from that location or the sample was not analyzed for that chemical.
J - estimated value
U - not detected, value shown is the quantitation limit
UJ - Estimated quantitation limit
ug/l - microgram/liter

Table C-2-D
Summary of Chemicals for Surface Water at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	WASW01	Surface Water	DIN	Aluminum	ug/l										1.91	6.66				5.2 5.9	
18/19	WASW01	Surface Water	DIN	Antimony	ug/l										0.1 U	0.143	1 UJ		0.42 UJ	0.090 U 0.090 U	0.05 U
18/19	WASW01	Surface Water	DIN	Arsenic	ug/l										0.632	0.264	1 U		0.26 J	0.84 0.78	0.50 U
18/19	WASW01	Surface Water	DIN	Barium	ug/l										6.59	5.98	4.02		6.9	7.37 7.41	7.04
18/19	WASW01	Surface Water	DIN	Beryllium	ug/l										0.15 U	0.15 U	1 U		0.043 U	0.020 U 0.020 U	0.030 U
18/19	WASW01	Surface Water	DIN	Cadmium	ug/l										0.2 U	0.2 U	1 U		0.57	0.020 U 0.020 U	0.030 U
18/19	WASW01	Surface Water	DIN	Calcium	ug/l										12300	17000					
18/19	WASW01	Surface Water	DIN	Chromium	ug/l										1.33	0.471	1 U		1.0 U	0.20 U 0.20 U	0.20
18/19	WASW01	Surface Water	DIN	Cobalt	ug/l										0.5 U	4.97					
18/19	WASW01	Surface Water	DIN	Copper	ug/l										0.618	0.486	1.09 J		0.52 U	0.10 U 0.10 U	0.20 U
18/19	WASW01	Surface Water	DIN	Iron	ug/l										50 U	6500					
18/19	WASW01	Surface Water	DIN	Lead	ug/l										0.523	0.1 U	1 UJ		0.075 U	0.030 U 0.030 U	0.030 U
18/19	WASW01	Surface Water	DIN	Magnesium	ug/l										3170	3700					
18/19	WASW01	Surface Water	DIN	Manganese	ug/l										29.3	116					
18/19	WASW01	Surface Water	DIN	Mercury	ug/l											0.2 U	0.2 U		0.111 J	0.20 U 0.20 U	0.20 UJ
18/19	WASW01	Surface Water	DIN	Nickel	ug/l										0.786	0.8	2 UJ		1.2 J	0.20 U 0.20 U	0.47
18/19	WASW01	Surface Water	DIN	Potassium	ug/l										2250	1900					
18/19	WASW01	Surface Water	DIN	Selenium	ug/l										0.796	0.5 U	0.91 J		0.94 UJ	1.2 U 1.2 U	1.5 U
18/19	WASW01	Surface Water	DIN	Silver	ug/l										0.1 U	0.1 U	0.07 UJ		0.085 U	0.030 U 0.030 U	0.030 U
18/19	WASW01	Surface Water	DIN	Sodium	ug/l										11400	15000					
18/19	WASW01	Surface Water	DIN	Thallium	ug/l										0.211	0.05 U	0.07 UJ		0.044 U	0.020 U 0.020 U	0.030 U
18/19	WASW01	Surface Water	DIN	Vanadium	ug/l										5 U	5 U					
18/19	WASW01	Surface Water	DIN	Zinc	ug/l										9.72	3.33	5 UJ		3.7 J	1.12 0.76 U	0.58 J
18/19	WASW01	Surface Water	TIN	Aluminum	ug/l					220	50 U	375	80.6 U	200 U	336	169				6.8 5.9	
18/19	WASW01	Surface Water	TIN	Antimony	ug/l					5 U	0.2 U	0.087 U	1.6 U	1 U	0.5 U	0.5 U	1 U		0.37 UJ	0.090 U 0.090 U	0.05 U
18/19	WASW01	Surface Water	TIN	Arsenic	ug/l	1 U	1 U	1 U	1 U	2 U	2 U	0.36 J	2.9 U	5 U	1.08	1 U	0.48 J		0.29 J	0.81 0.87	0.50 U
18/19	WASW01	Surface Water	TIN	Barium	ug/l	4.3 J	4 J	4 U	4.4 J	3.2	5 U	2.9 J	9.7 J	4	16.4	9.67	7.06		8.8 J	7.48 7.45	8.04
18/19	WASW01	Surface Water	TIN	Beryllium	ug/l					0.26 U	0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U		0.043 U	0.020 U 0.020 U	0.030 U
18/19	WASW01	Surface Water	TIN	Cadmium	ug/l	1 U	2 U	5 U	2 U	0.057 UJ	0.2 U	0.053 U	0.3 U	2 U	0.2 U	0.2 U	1 U		0.094 U	0.020 U 0.020 U	0.030 U
18/19	WASW01	Surface Water	TIN	Calcium	ug/l	4340 J	4790 J	6770	5430	6170	4760	15800	5270	5110	18800						
18/19	WASW01	Surface Water	TIN	Chromium	ug/l	4 U	6 U	6 U	10.1	4 UJ	5 U	2 J	0.4 J	6 U	0.205	0.1 U	1.37		1.0 U	0.20 U 0.20 U	0.21

Table C-2-D
Summary of Chemicals for Surface Water at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	WASW01	Surface Water	TIN	Cobalt	ug/l					4 U	10 U	0.043 U	0.5 U	0.8 U	2.25	1.18					
18/19	WASW01	Surface Water	TIN	Copper	ug/l	2 U	4 U	3 U	3 U	4 UJ	2 U	1 J	1.1 U	6 U	1.68	0.5 U	1.3 J		0.52 U	1.23 0.10 U	0.15 U
18/19	WASW01	Surface Water	TIN	Iron	ug/l	83.4 J	181	57.7 J	113	100 U	105	8360	417	1000 U	26100						
18/19	WASW01	Surface Water	TIN	Lead	ug/l	1 U	1 J	1 U	1 U	0.019 UJ	0.2 U	0.37 J	1.6 U	2 U	0.923	0.15 U	0.26 J		0.075 U	0.030 U 0.030 U	0.030 U
18/19	WASW01	Surface Water	TIN	Magnesium	ug/l	1810	1600 J	2190 J	1970 J	2110	1560	5350	4100 J	1930	4390						
18/19	WASW01	Surface Water	TIN	Manganese	ug/l	2.2 J	3.4 J	1 U	2.3 J	2.3 J	5 U	1 J	18.5	4 U	438	261					
18/19	WASW01	Surface Water	TIN	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		0.0180 UJ	0.20 U 0.20 U	0.20 U
18/19	WASW01	Surface Water	TIN	Nickel	ug/l					4 U	20 U	1.6 J	0.8 J	2 U	1.25	0.86	2 U		0.78 J	3.55 0.24 U	0.57
18/19	WASW01	Surface Water	TIN	Potassium	ug/l	948 J	526 J	972 J	1430 J	930	2000 U	1860	1340 J	1070	5890						
18/19	WASW01	Surface Water	TIN	Selenium	ug/l	1 U	1 U	5 U	1 U	0.48 U	2 U	0.58 U	2.2 J	5 U	0.5 U	0.5 U	1 UJ		1.1 UJ	1.2 U 1.2 U	1.5 U
18/19	WASW01	Surface Water	TIN	Silver	ug/l	3 U	3 U	3 U	3 U	4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	0.621 J	0.11 J		0.085 U	0.030 U 0.030 U	0.030 U
18/19	WASW01	Surface Water	TIN	Sodium	ug/l	10700	8400	10100	9020	10400	7880	23600	18300 J		14600						
18/19	WASW01	Surface Water	TIN	Thallium	ug/l					10 U	0.2 U	0.012 U	3.5 U	2 U	0.25 U	0.25 U	0.13 J		0.044 U	0.020 U 0.020 U	0.030 U
18/19	WASW01	Surface Water	TIN	Vanadium	ug/l					3 U	10 U	1 J	0.4 J	20 U	4.89	1 U					
18/19	WASW01	Surface Water	TIN	Zinc	ug/l	38.8	6.2 J	12.5 J	6.4 J	29.3 U	10 U	5.1	9 J	25 U	5.82	1.33	3.18 J		5.0 U	0.85 U 1.20	0.56 J
18/19	WASW01	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U					
18/19	WASW01	Surface Water	VOA	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U		1.0 U	2.0 U 2.0 U	
18/19	WASW01	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U		1 U		1 U		2.5 U	10 U	10 U	5 U		1.0 U	2.0 U 2.0 U	
18/19	WASW01	Surface Water	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	2.0 U 2.0 U	
18/19	WASW01	Surface Water	VOA	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	0.25 J	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	1,2-Dichloroethene	ug/l						0.5 U										
18/19	WASW01	Surface Water	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	1,3-Dichloro-2-propanol	ug/l	50 U	100 U	100 U													

Table C-2-D
Summary of Chemicals for Surface Water at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	WASW01	Surface Water	VOA	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U										
18/19	WASW01	Surface Water	VOA	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U	5 U													
18/19	WASW01	Surface Water	VOA	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	1,4-Dioxane	ug/l	250 U	250 U	250 U													
18/19	WASW01	Surface Water	VOA	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	2-Butanone	ug/l	20	5 U	14	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U		5.0 U		
18/19	WASW01	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l	37 J	10 U	0.23 J						10 U	10 U	10 U					
18/19	WASW01	Surface Water	VOA	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	10 U		5.0 U		
18/19	WASW01	Surface Water	VOA	2-Nitropropane	ug/l	10 U	10 U	10 U													
18/19	WASW01	Surface Water	VOA	3-chloropropene	ug/l	5 U	5 U	5 U													
18/19	WASW01	Surface Water	VOA	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U		1.0 U		
18/19	WASW01	Surface Water	VOA	4-Methyl-2-pentanone	ug/l	22	5 U	16	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	5 U		5.0 U		
18/19	WASW01	Surface Water	VOA	Acetone	ug/l	110	5 U	70	5 U		20 U	5 U	5 U		50 U	50 U	25 U		2.5 J	20 UJ 20 UJ	
18/19	WASW01	Surface Water	VOA	Acetonitrile	ug/l	5 U	5 U	5 U													
18/19	WASW01	Surface Water	VOA	Acrolein	ug/l	100 U	25 U	25 U													
18/19	WASW01	Surface Water	VOA	Acrylonitrile	ug/l	50 U	10 U	10 U							10 U	10 U					
18/19	WASW01	Surface Water	VOA	Benzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Benzyl chloride	ug/l	5 U	5 U	5 U													
18/19	WASW01	Surface Water	VOA	Bromoacetone	ug/l	2000 U	2000 U	2000 U													
18/19	WASW01	Surface Water	VOA	Bromobenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Bromochloromethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U		1.0 U		
18/19	WASW01	Surface Water	VOA	BTEX (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U										
18/19	WASW01	Surface Water	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	0.81 J	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Chloromethane	ug/l	15	1 U	57 J	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Chloroprene	ug/l	50 U	10 U	10 U													
18/19	WASW01	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	5 U	5 U	5 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Diethyl ether	ug/l	10 U	10 U	10 U													
18/19	WASW01	Surface Water	VOA	Ethyl methacrylate	ug/l	5 U	5 U	5 U													

Table C-2-D
Summary of Chemicals for Surface Water at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	WASW01	Surface Water	VOA	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Ethylene oxide	ug/l	250 U	25 U	25 U													
18/19	WASW01	Surface Water	VOA	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Hexachloroethane	ug/l	10 U	10 U	10 U													
18/19	WASW01	Surface Water	VOA	Iodomethane	ug/l	5 U	5 U	0.57 J							5 U	5 U					
18/19	WASW01	Surface Water	VOA	Isobutyl alcohol	ug/l	61 J	100 U	52 J													
18/19	WASW01	Surface Water	VOA	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U		1.0 U		
18/19	WASW01	Surface Water	VOA	LPAH (total)	ug/l	1 U	1 U	1 U													
18/19	WASW01	Surface Water	VOA	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	2 U		2.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Malononitrile	ug/l	1000000 U															
18/19	WASW01	Surface Water	VOA	Methacrylonitrile	ug/l	5 U	5 U	5 U													
18/19	WASW01	Surface Water	VOA	Methyl methacrylate	ug/l	5 U	5 U	5 U													
18/19	WASW01	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Methylene chloride	ug/l	1 U	1 U	1 U	1 U	2 U	1 U	2 U	1 U	5 U	5 U	0.79 U	5 U		1.0 U	2.0 U 2.0 U	
18/19	WASW01	Surface Water	VOA	Naphthalene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	2 U		1.0 U		
18/19	WASW01	Surface Water	VOA	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U		1.0 U		
18/19	WASW01	Surface Water	VOA	NCPAH (total)	ug/l	1 U	1 U	1 U													
18/19	WASW01	Surface Water	VOA	Nitrobenzene	ug/l	100 U	25 U	25 U													
18/19	WASW01	Surface Water	VOA	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Propargyl alcohol	ug/l	1000 U	1000 U	1000 U													
18/19	WASW01	Surface Water	VOA	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Toluene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U	5 U							10 U	10 U					
18/19	WASW01	Surface Water	VOA	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Trichlorofluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW01	Surface Water	VOA	Vinyl acetate	ug/l	10 U	5 U	5 U							5 U	5 U					
18/19	WASW01	Surface Water	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U		1.0 U	0.50 U 0.50 U	
18/19	WASW01	Surface Water	VOA	Xylenes	ug/l					1 U	0.5 U	1 U		2 U						1.0 U 1.0 U	
18/19	WASW01	Surface Water	VOA	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U									1.0 U 1.0 U	
18/19	WASW02	Surface Water	DIN	Aluminum	ug/l										5.42	1.8				2.0 U	
18/19	WASW02	Surface Water	DIN	Antimony	ug/l										5.15	0.188	1 U		0.072 UJ	0.090 U	0.05 U
18/19	WASW02	Surface Water	DIN	Arsenic	ug/l										0.523	0.572	1 UJ		0.43 J	0.71	0.53 U
18/19	WASW02	Surface Water	DIN	Barium	ug/l										6.77	5.95	6.98		7.3	5.96	6.10
18/19	WASW02	Surface Water	DIN	Beryllium	ug/l										0.15 U	0.15 U	1 U		0.043 U	0.020 U	0.030 U
18/19	WASW02	Surface Water	DIN	Cadmium	ug/l										0.2 U	0.2 U	1 U		0.37	0.020 U	0.030 U

Table C-2-D
Summary of Chemicals for Surface Water at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	WASW02	Surface Water	DIN	Calcium	ug/l										15000	14000					
18/19	WASW02	Surface Water	DIN	Chromium	ug/l										1.52	0.452	1 U		1.0 U	0.20 U	0.20 U
18/19	WASW02	Surface Water	DIN	Cobalt	ug/l										0.5 U	4.33					
18/19	WASW02	Surface Water	DIN	Copper	ug/l										0.923	1.06	2 U		0.52 U	0.10 U	0.15 U
18/19	WASW02	Surface Water	DIN	Iron	ug/l										158	240					
18/19	WASW02	Surface Water	DIN	Lead	ug/l										0.12	0.1 U	1 U		0.075 U	0.030 U	0.030 U
18/19	WASW02	Surface Water	DIN	Magnesium	ug/l										4930	2900					
18/19	WASW02	Surface Water	DIN	Manganese	ug/l										95.7	13.6					
18/19	WASW02	Surface Water	DIN	Mercury	ug/l											0.2 U	0.2 U		0.0180 UJ	0.20 U	0.20 UJ
18/19	WASW02	Surface Water	DIN	Nickel	ug/l										0.888	0.674	0.38 UJ		0.90 J	0.20 U	0.36
18/19	WASW02	Surface Water	DIN	Potassium	ug/l										6640	1400					
18/19	WASW02	Surface Water	DIN	Selenium	ug/l										1.01	0.5 U	1 U		0.42 UJ	1.2 U	1.5 U
18/19	WASW02	Surface Water	DIN	Silver	ug/l										0.1 U	0.1 U	1 U		0.085 U	0.030 U	0.030 U
18/19	WASW02	Surface Water	DIN	Sodium	ug/l										13500	13000					
18/19	WASW02	Surface Water	DIN	Thallium	ug/l										0.258	0.05 U	1 U		0.044 U	0.020 U	0.030 U
18/19	WASW02	Surface Water	DIN	Vanadium	ug/l										5 U	5 U					
18/19	WASW02	Surface Water	DIN	Zinc	ug/l										3.75	2.89	5 U		2.6 J	0.60 U	0.40 J
18/19	WASW02	Surface Water	TIN	Aluminum	ug/l					299	50 U	239	80.6 U	200 U	34.9	50				3.2	
18/19	WASW02	Surface Water	TIN	Antimony	ug/l					5 U	0.2 U	0.087 U	1.6 U	1 U	0.5 U	0.5 U	1 U		0.056 U	0.090 U	0.05 U
18/19	WASW02	Surface Water	TIN	Arsenic	ug/l	1.7 J	1 U	1 U	1 U	2 U	2 U	0.37 J	2.9 U	5 U	1 U	1 U	1 U		0.44 J	0.75	0.62
18/19	WASW02	Surface Water	TIN	Barium	ug/l	8.5 J	9.8 J	8.8 J	7.6 J	8	7	6.2 J	7.8 J	6.94	6.94	6.73	6.8		11.4 J	5.81	6.18
18/19	WASW02	Surface Water	TIN	Beryllium	ug/l					0.26 U	0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U		0.043 U	0.020 U	0.030 U
18/19	WASW02	Surface Water	TIN	Cadmium	ug/l	1 U	2 U	5 U	2 U	0.057 UJ	0.2 U	1.7	0.3 U	2 U	0.2 U	0.2 U	1 U		0.094 U	0.020 U	0.030 U
18/19	WASW02	Surface Water	TIN	Calcium	ug/l	29500	27100	25800	23400	17500	22800	596	5600	14200	13900						
18/19	WASW02	Surface Water	TIN	Chromium	ug/l	4 U	6 U	6 U	9 U	4 UJ	5 U	1 J	0.4 J	6 U	0.1 U	0.1 U	0.91 J		1.0 U	0.20 U	0.20 U
18/19	WASW02	Surface Water	TIN	Cobalt	ug/l					4 U	10 U	0.23 J	0.5 U	0.8 U	0.1 U	0.1 U					
18/19	WASW02	Surface Water	TIN	Copper	ug/l	2 U	4 U	3 U	3 U	4 UJ	2 U	0.7 U	1.1 U	6 U	0.5 U	0.5 U	1.3 J		0.52 U	0.10 U	0.10 U
18/19	WASW02	Surface Water	TIN	Iron	ug/l	2000	1460	999	1750	6940	315	1020	713	1460	561						
18/19	WASW02	Surface Water	TIN	Lead	ug/l	1 U	1.2 J	1 U	1 U	0.019 UJ	0.2 U	0.036 U	1.6 U	2 U	0.15 U	0.15 U	1 U		0.075 U	0.030 U	0.030 U
18/19	WASW02	Surface Water	TIN	Magnesium	ug/l	5190	4730 J	4580 J	4280 J	4230	4600	765	3100 J	3500	3050						
18/19	WASW02	Surface Water	TIN	Manganese	ug/l	160	105	147	184	191	30	132	40.3	103	41.4	29.9					
18/19	WASW02	Surface Water	TIN	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		0.0180 UJ	0.20 U	0.20 U
18/19	WASW02	Surface Water	TIN	Nickel	ug/l					4 U	20 U	1.8 J	0.7 U	2 U	0.85	0.596	2 U		0.58 J	0.20 U	0.30
18/19	WASW02	Surface Water	TIN	Potassium	ug/l	1990 J	1870 J	1990 J	1990 J	1510	2000 U	978	1140 J	1570	2060						
18/19	WASW02	Surface Water	TIN	Selenium	ug/l	1 U	5 U	5 U	1 U	0.48 U	2 U	1.5 J	1.1 U	5 U	0.5 U	0.5 U	1 U		0.26 UJ	1.2 U	1.5 U
18/19	WASW02	Surface Water	TIN	Silver	ug/l	3 U	3 U	3 U	3 U	4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	0.605 J	1 U		0.085 U	0.030 U	0.030 U
18/19	WASW02	Surface Water	TIN	Sodium	ug/l	16800	15600	15100	14500	15700	16200	4400	13700 J		12900						
18/19	WASW02	Surface Water	TIN	Thallium	ug/l					10 U	0.2 U	1.2 J	3.5 U	2 U	0.25 U	0.25 U	1 U		0.044 U	0.020 U	0.030 U
18/19	WASW02	Surface Water	TIN	Vanadium	ug/l					3.4 J	10 U	1.1 J	0.6 J	20 U	5.22	3.58					
18/19	WASW02	Surface Water	TIN	Zinc	ug/l	38.1	3.2 J	6.1 J	8.1 J	20 U	10 U	7.7	42.9	25 U	2.61	1 U	5 U		5.0 U	0.55 U	0.49 J
18/19	WASW02	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	1.6 J	1.9 J	1.37		1.4		
18/19	WASW02	Surface Water	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U					
18/19	WASW02	Surface Water	VOA	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U		1.0 U	2.0 U	
18/19	WASW02	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U		1 U		1 U		2.5 U	10 U	10 U	5 U		1.0 U	2.0 U	

Table C-2-D
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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	WASW02	Surface Water	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	2.0 U	
18/19	WASW02	Surface Water	VOA	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	1,2-Dichloroethene	ug/l						0.5 U										
18/19	WASW02	Surface Water	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	1,3-Dichloro-2-propanol	ug/l	50 U	100 U														
18/19	WASW02	Surface Water	VOA	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U										
18/19	WASW02	Surface Water	VOA	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U														
18/19	WASW02	Surface Water	VOA	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	1,4-Dioxane	ug/l	250 U	250 U														
18/19	WASW02	Surface Water	VOA	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	2-Butanone	ug/l	5 U	5 U	5 U	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U		5.0 U		
18/19	WASW02	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l	50 U	10 U							10 U	10 U	10 U					
18/19	WASW02	Surface Water	VOA	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	10 U		5.0 U		
18/19	WASW02	Surface Water	VOA	2-Nitropropane	ug/l	10 U	10 U														
18/19	WASW02	Surface Water	VOA	3-chloropropene	ug/l	5 U	5 U														
18/19	WASW02	Surface Water	VOA	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U		1.0 U		
18/19	WASW02	Surface Water	VOA	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	5 U		5.0 U		
18/19	WASW02	Surface Water	VOA	Acetone	ug/l	5 U	5 U	5 U	5 U		20 U	5 U	5 U		50 U	50 U	25 U		1.9 J	20 UJ	
18/19	WASW02	Surface Water	VOA	Acetonitrile	ug/l	5 U	5 U														
18/19	WASW02	Surface Water	VOA	Acrolein	ug/l	100 U	25 U														
18/19	WASW02	Surface Water	VOA	Acrylonitrile	ug/l	50 U	10 U								10 U	10 U					
18/19	WASW02	Surface Water	VOA	Benzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Benzyl chloride	ug/l	5 U	5 U														
18/19	WASW02	Surface Water	VOA	Bromoacetone	ug/l	2000 U	2000 U														
18/19	WASW02	Surface Water	VOA	Bromobenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Bromochloromethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U		1.0 U		
18/19	WASW02	Surface Water	VOA	BTEX (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U										
18/19	WASW02	Surface Water	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	9.8	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Chloromethane	ug/l	1 U	1 U	17	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Chloroprene	ug/l	50 U	10 U														
18/19	WASW02	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	5 U	5 U	5 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Diethyl ether	ug/l	10 U	10 U														
18/19	WASW02	Surface Water	VOA	Ethyl methacrylate	ug/l	5 U	5 U														
18/19	WASW02	Surface Water	VOA	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Ethylene oxide	ug/l	250 U	25 U														
18/19	WASW02	Surface Water	VOA	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U		1.0 U		

Table C-2-D
Summary of Chemicals for Surface Water at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	WASW02	Surface Water	VOA	Hexachloroethane	ug/l	10 U	10 U														
18/19	WASW02	Surface Water	VOA	Iodomethane	ug/l	5 U	5 U								5 U	5 U					
18/19	WASW02	Surface Water	VOA	Isobutyl alcohol	ug/l	100 U	100 U														
18/19	WASW02	Surface Water	VOA	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U		1.0 U		
18/19	WASW02	Surface Water	VOA	LPAH (total)	ug/l	1 U	1 U	1 U													
18/19	WASW02	Surface Water	VOA	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	2 U		2.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Malononitrile	ug/l	1000000 U															
18/19	WASW02	Surface Water	VOA	Methacrylonitrile	ug/l	5 U	5 U														
18/19	WASW02	Surface Water	VOA	Methyl methacrylate	ug/l	5 U	5 U														
18/19	WASW02	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Methylene chloride	ug/l	1 U	1 U	1 U	1 U	2 U	1 U	2 U	1 U	5 U	5 U	0.85 U	5 U		1.0 U	2.0 U	
18/19	WASW02	Surface Water	VOA	Naphthalene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	2 U		1.0 U		
18/19	WASW02	Surface Water	VOA	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U		1.0 U		
18/19	WASW02	Surface Water	VOA	NCPAH (total)	ug/l	1 U	1 U	1 U													
18/19	WASW02	Surface Water	VOA	Nitrobenzene	ug/l	100 U	25 U														
18/19	WASW02	Surface Water	VOA	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Propargyl alcohol	ug/l	1000 U	1000 U														
18/19	WASW02	Surface Water	VOA	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Toluene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U								10 U	10 U					
18/19	WASW02	Surface Water	VOA	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.88 J	1 J	1.06		0.90 J	1.0	
18/19	WASW02	Surface Water	VOA	Trichlorofluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW02	Surface Water	VOA	Vinyl acetate	ug/l	10 U	5 U								5 U	5 U					
18/19	WASW02	Surface Water	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U		1.0 U	0.50 U	
18/19	WASW02	Surface Water	VOA	Xylenes	ug/l					1 U	0.5 U	1 U		2 U						1.0 U	
18/19	WASW02	Surface Water	VOA	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U									1.0 U	
18/19	WASW03	Surface Water	DIN	Aluminum	ug/l										16.1	152				10.8	
18/19	WASW03	Surface Water	DIN	Antimony	ug/l										0.1 U	0.377	1 U		0.41 UJ	0.090 U	0.05 U
18/19	WASW03	Surface Water	DIN	Arsenic	ug/l										0.29	0.177	1 U		0.13 J	0.37 B	0.50 U
18/19	WASW03	Surface Water	DIN	Barium	ug/l										5.96	3.48	3.43		6.8	4.13	3.58
18/19	WASW03	Surface Water	DIN	Beryllium	ug/l										0.15 U	0.15 U	1 U		0.043 U	0.020 U	0.030 U
18/19	WASW03	Surface Water	DIN	Cadmium	ug/l										0.2 U	0.2 U	1 U		0.094 U	0.020 U	0.030 U
18/19	WASW03	Surface Water	DIN	Calcium	ug/l										1450	1600					
18/19	WASW03	Surface Water	DIN	Chromium	ug/l										1.05	0.208	1 U		1.0 U	0.20 U	0.20 U
18/19	WASW03	Surface Water	DIN	Cobalt	ug/l										0.516	12.1					
18/19	WASW03	Surface Water	DIN	Copper	ug/l										0.871	9.48 J	2.47		1.9 J	0.96	1.25
18/19	WASW03	Surface Water	DIN	Iron	ug/l										108	1900					
18/19	WASW03	Surface Water	DIN	Lead	ug/l										0.52	0.718	1 UJ		1.0 U	0.030 U	0.036
18/19	WASW03	Surface Water	DIN	Magnesium	ug/l										1860	1300					
18/19	WASW03	Surface Water	DIN	Manganese	ug/l										41.2	39.2					
18/19	WASW03	Surface Water	DIN	Mercury	ug/l											0.2 U	0.2 U		0.165 J	0.20 U	0.20 UJ
18/19	WASW03	Surface Water	DIN	Nickel	ug/l										0.48	1.22	2 UJ		0.50 J	0.24 U	0.30
18/19	WASW03	Surface Water	DIN	Potassium	ug/l										749	1000 U					
18/19	WASW03	Surface Water	DIN	Selenium	ug/l										0.516	0.5 U	1 U		0.24 UJ	1.2 U	1.5 U
18/19	WASW03	Surface Water	DIN	Silver	ug/l										0.189	0.1 U	1 U		0.085 U	0.030 U	0.030 U
18/19	WASW03	Surface Water	DIN	Sodium	ug/l										7800	10000					
18/19	WASW03	Surface Water	DIN	Thallium	ug/l										0.253	0.05 U	1 U		0.044 U	0.020 U	0.030 U

Table C-2-D
Summary of Chemicals for Surface Water at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	WASW03	Surface Water	DIN	Vanadium	ug/l										5 U	5 U					
18/19	WASW03	Surface Water	DIN	Zinc	ug/l										14.9	12.2	6.81		12.4	7.18	6.78 J
18/19	WASW03	Surface Water	TIN	Aluminum	ug/l					3710	137	120	732	200 U	80.9	323				25.8	
18/19	WASW03	Surface Water	TIN	Antimony	ug/l					5 U	0.2 U	0.087 U	1.6 U	1 U	0.5 U	0.5 U	1 U		0.64 UJ	0.090 U	0.05 U
18/19	WASW03	Surface Water	TIN	Arsenic	ug/l	1 U	1 U	1 U	1 U	2 U	2 U	0.2 U	2.9 U	5 U	1 U	1 U	1 U		0.13 J	0.41 B	0.50 U
18/19	WASW03	Surface Water	TIN	Barium	ug/l	2.4 J	6.1 J	4.5 J	3.7 J	20	5 U	1.7 J	7.4 J	3 U	6.05	4.26	3.46		6.6	4.30	3.64
18/19	WASW03	Surface Water	TIN	Beryllium	ug/l					0.26 U	0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U		0.043 U	0.020 U	0.030 U
18/19	WASW03	Surface Water	TIN	Cadmium	ug/l	1 U	2 U	5 U	2 U	0.057 UJ	0.2 U	0.053 U	0.3 U	2 U	0.2 U	0.2 U	1 U		0.094 U	0.020 U	0.030 U
18/19	WASW03	Surface Water	TIN	Calcium	ug/l	1220 J	1420 J	1190 J	1550 J	4730	1320	14900	2370 J	1000 U	1430						
18/19	WASW03	Surface Water	TIN	Chromium	ug/l	4 U	7.8 J	6 U	9 U	4 UJ	5 U	2.7 J	0.4 U	6 U	0.1 U	0.1 U	1 U		1.0 U	0.20 U	0.20 U
18/19	WASW03	Surface Water	TIN	Cobalt	ug/l					4 U	10 U	0.043 U	0.5 U	0.8 U	0.284	0.263					
18/19	WASW03	Surface Water	TIN	Copper	ug/l	3.2 J	4 U	3 U	3.4 J	9 J	2 U	2.2 J	2.3 J	6 U	0.992	0.5 U	5.29		2.1	1.07	1.22
18/19	WASW03	Surface Water	TIN	Iron	ug/l	971	2080	214	369	7530	1270	462	544	1000 U	474						
18/19	WASW03	Surface Water	TIN	Lead	ug/l	1 U	1.1 J	1 U	1 U	1.9 J	0.2	0.17 J	1.8 J	2 U	0.225	0.327	0.55 J		0.23 J	0.075	0.072
18/19	WASW03	Surface Water	TIN	Magnesium	ug/l	1610	2000 J	1320 J	1630 J	4850	1410	9930	3110 J	1220	1840						
18/19	WASW03	Surface Water	TIN	Manganese	ug/l	9.5 J	23.8	90.9	20.7	505	14	8.4 J	32.5	9.8	48.2	25.5					
18/19	WASW03	Surface Water	TIN	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		0.0180 UJ	0.20 U	0.20 U
18/19	WASW03	Surface Water	TIN	Nickel	ug/l					4 U	20 U	2.3 J	0.7 U	2 U	0.5 U	0.5 U	3.98		0.41 J	0.20 U	0.28
18/19	WASW03	Surface Water	TIN	Potassium	ug/l	707 J	537 J	359 J	3360 J	2460	2000 U	8790	1800 J	1250	684						
18/19	WASW03	Surface Water	TIN	Selenium	ug/l	1 U	1 U	1 U	1 U	3 U	2 U	0.58 U	1.1 U	5 U	0.5 U	0.5 U	1 U		0.31 UJ	1.2 U	1.5 U
18/19	WASW03	Surface Water	TIN	Silver	ug/l	3 U	3 U	3 U	3 U	4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	1.1 J	1 U		0.085 U	0.030 U	0.030 U
18/19	WASW03	Surface Water	TIN	Sodium	ug/l	12200	7570	7350	8540	27100	8430	97100	18300		8120						
18/19	WASW03	Surface Water	TIN	Thallium	ug/l					10 U	0.2 U	0.012 U	3.5 U	2 U	0.25 U	0.25 U	1 U		0.044 U	0.021 U	0.030 U
18/19	WASW03	Surface Water	TIN	Vanadium	ug/l					10.1	10 U	1.2 J	1.4 J	20 U	1 U	1 U					
18/19	WASW03	Surface Water	TIN	Zinc	ug/l	42.1	8 J	22.8	15.7 J	41.7 U	10 U	13.1	6.7 J	25 U	13.2	6.34	16.8		11.5 J	8.09	6.64 J
18/19	WASW03	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U					
18/19	WASW03	Surface Water	VOA	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U		1.0 U	2.0 U	
18/19	WASW03	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U		1 U		1 U		2.5 U	10 U	10 U	5 U		1.0 U	2.0 U	
18/19	WASW03	Surface Water	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	2.0 U	
18/19	WASW03	Surface Water	VOA	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	1,2-Dichloroethene	ug/l						0.5 U										
18/19	WASW03	Surface Water	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	1,3-Dichloro-2-propanol	ug/l	50 U	100 U	100 U													
18/19	WASW03	Surface Water	VOA	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U										
18/19	WASW03	Surface Water	VOA	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U	5 U													
18/19	WASW03	Surface Water	VOA	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	1,4-Dioxane	ug/l	250 U	250 U	250 U													
18/19	WASW03	Surface Water	VOA	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	2-Butanone	ug/l	16	5 U	5 U	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U		5.0 U		

Table C-2-D
Summary of Chemicals for Surface Water at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	WASW03	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l	30 J	10 U	10 U						10 U	10 U	10 U					
18/19	WASW03	Surface Water	VOA	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	10 U		5.0 U		
18/19	WASW03	Surface Water	VOA	2-Nitropropane	ug/l	10 U	10 U	10 U													
18/19	WASW03	Surface Water	VOA	3-chloropropene	ug/l	5 U	5 U	5 U													
18/19	WASW03	Surface Water	VOA	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U		1.0 U		
18/19	WASW03	Surface Water	VOA	4-Methyl-2-pentanone	ug/l	18	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	5 U		5.0 U		
18/19	WASW03	Surface Water	VOA	Acetone	ug/l	92	5 U	5 U	5 U		20 U	5 U	5 U		50 U	50 U	25 U		5.0 U	20 UJ	
18/19	WASW03	Surface Water	VOA	Acetonitrile	ug/l	5 U	5 U	5 U													
18/19	WASW03	Surface Water	VOA	Acrolein	ug/l	100 U	25 U	25 U													
18/19	WASW03	Surface Water	VOA	Acrylonitrile	ug/l	50 U	10 U	10 U							10 U	10 U					
18/19	WASW03	Surface Water	VOA	Benzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Benzyl chloride	ug/l	5 U	5 U	5 U													
18/19	WASW03	Surface Water	VOA	Bromoacetone	ug/l	2000 U	2000 U	2000 U													
18/19	WASW03	Surface Water	VOA	Bromobenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Bromochloromethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U		1.0 U		
18/19	WASW03	Surface Water	VOA	BTEX (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U										
18/19	WASW03	Surface Water	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Chloromethane	ug/l	12	1 U	47 J	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Chloroprene	ug/l	50 U	10 U	10 U													
18/19	WASW03	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	1.3 J	5 U	5 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Diethyl ether	ug/l	10 U	10 U	10 U													
18/19	WASW03	Surface Water	VOA	Ethyl methacrylate	ug/l	5 U	5 U	5 U													
18/19	WASW03	Surface Water	VOA	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Ethylene oxide	ug/l	250 U	25 U	25 U													
18/19	WASW03	Surface Water	VOA	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Hexachloroethane	ug/l	10 U	10 U	10 U													
18/19	WASW03	Surface Water	VOA	Iodomethane	ug/l	5 U	5 U	5 U							1.2 J	5 U					
18/19	WASW03	Surface Water	VOA	Isobutyl alcohol	ug/l	51 J	100 U	100 U													
18/19	WASW03	Surface Water	VOA	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U		1.0 U		
18/19	WASW03	Surface Water	VOA	LPAH (total)	ug/l	1 U	1 U	1 U													
18/19	WASW03	Surface Water	VOA	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	2 U		2.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Malononitrile	ug/l	1000000 U															
18/19	WASW03	Surface Water	VOA	Methacrylonitrile	ug/l	5 U	5 U	5 U													
18/19	WASW03	Surface Water	VOA	Methyl methacrylate	ug/l	5 U	5 U	5 U													
18/19	WASW03	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Methylene chloride	ug/l	1 U	1 U	1 U	1 U	2 U	1 U	2 U	1 U	5 U	5 U	1.1 U	5 U		1.0 U	2.0 U	
18/19	WASW03	Surface Water	VOA	Naphthalene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	2 U		1.1		
18/19	WASW03	Surface Water	VOA	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U		1.0 U		
18/19	WASW03	Surface Water	VOA	NCPAH (total)	ug/l	1 U	1 U	1 U													
18/19	WASW03	Surface Water	VOA	Nitrobenzene	ug/l	100 U	25 U	25 U													

Table C-2-D
Summary of Chemicals for Surface Water at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	WASW03	Surface Water	VOA	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Propargyl alcohol	ug/l	1000 U	1000 U	1000 U													
18/19	WASW03	Surface Water	VOA	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Toluene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U	5 U							10 U	10 U					
18/19	WASW03	Surface Water	VOA	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Trichlorofluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	WASW03	Surface Water	VOA	Vinyl acetate	ug/l	10 U	5 U	5 U							5 U	5 U					
18/19	WASW03	Surface Water	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U		1.0 U	0.50 U	
18/19	WASW03	Surface Water	VOA	Xylenes	ug/l					1 U	0.5 U	1 U		2 U						1.0 U	
18/19	WASW03	Surface Water	VOA	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U									1.0 U	

Notes:

Blank cells in the concentration columns indicate that a sample was not collected from that location or the sample was not analyzed for that chemical.
J - estimated value
U - not detected, value shown is the quantitation limit
UJ - Estimated quantitation limit
ug/l - microgram/liter

Table C-2-E
Summary of Chemicals in Groundwater at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	21-3	Groundwater	DIN	Aluminum	ug/l										21.5	18.6				7.8 11.5	
18/19	21-3	Groundwater	DIN	Antimony	ug/l										0.18	0.12	1 UJ		0.056 U	0.090 U 0.090 U	0.05 U
18/19	21-3	Groundwater	DIN	Arsenic	ug/l										3.03	0.975	0.48 J		4.7	1.36 3.10	0.82
18/19	21-3	Groundwater	DIN	Barium	ug/l										6.81	6.86	7.6		7.0	5.31 5.99	5.64
18/19	21-3	Groundwater	DIN	Beryllium	ug/l										0.15 U	0.15 U	1 U		0.043 U	0.020 U 0.020 U	0.030 U
18/19	21-3	Groundwater	DIN	Cadmium	ug/l										0.339	0.2 U	1 UJ		0.094 U	0.020 U 0.020 U	0.030 U
18/19	21-3	Groundwater	DIN	Calcium	ug/l										13400	14000					
18/19	21-3	Groundwater	DIN	Chromium	ug/l										1.69	0.826	1 U		1.0 U	0.20 U 0.20 U	0.11 J
18/19	21-3	Groundwater	DIN	Cobalt	ug/l										0.5 U	2.92					
18/19	21-3	Groundwater	DIN	Copper	ug/l										0.638	0.825	2 U		0.52 U	0.10 U 0.10 U	0.10 U
18/19	21-3	Groundwater	DIN	Iron	ug/l										6150	8700					
18/19	21-3	Groundwater	DIN	Lead	ug/l										0.503	0.1 U	1 U		0.075 U	0.030 U 0.030 U	0.030 U
18/19	21-3	Groundwater	DIN	Magnesium	ug/l										5490	4500					
18/19	21-3	Groundwater	DIN	Manganese	ug/l										295	249					
18/19	21-3	Groundwater	DIN	Mercury	ug/l											0.2 U	0.2 U		0.137 J	0.20 U 0.20 U	0.20 UJ
18/19	21-3	Groundwater	DIN	Nickel	ug/l										0.848	0.638	0.51 J		1.0 J	0.20 U 0.20 U	0.54
18/19	21-3	Groundwater	DIN	Potassium	ug/l										1590	1500					
18/19	21-3	Groundwater	DIN	Selenium	ug/l										0.641	0.5 U	1 U		0.50 UJ	1.2 U 1.2 U	1.5 U
18/19	21-3	Groundwater	DIN	Silver	ug/l										0.128	0.319	1 U		0.085 U	0.030 U 0.030 U	0.030 U
18/19	21-3	Groundwater	DIN	Sodium	ug/l										22800	26000					
18/19	21-3	Groundwater	DIN	Thallium	ug/l										0.307	0.05 U	0.06 J		0.044 U	0.020 U 0.020 U	0.030 U
18/19	21-3	Groundwater	DIN	Vanadium	ug/l										5 U	5 U					
18/19	21-3	Groundwater	DIN	Zinc	ug/l										62.1	1.9 J	5 U		2.3 J	0.83 U 0.66 U	0.84
18/19	21-3	Groundwater	TIN	Aluminum	ug/l					9110	603	45.2 J	188 J	249	2300	4480				3770 1710	
18/19	21-3	Groundwater	TIN	Antimony	ug/l					5 U	0.2 U	0.087 U	1.6 U	1 U	0.5 U	0.5 U	0.22 J		0.29 UJ	0.090 U 0.090 U	0.05 U
18/19	21-3	Groundwater	TIN	Arsenic	ug/l	6.8 J	2.2 J	1 U	1 U	10.2	3	0.43 J	2.9 U	5 U	2.04	2.12	2.22		7.4	2.37 1.67	0.90
18/19	21-3	Groundwater	TIN	Barium	ug/l	26.7 J	9.6 J	8.4 J	7.6 J	23.7	8	22.1	6.7 J	12.4	12.6	16.7	23.8		53.2 J	15.0 8.90	5.93
18/19	21-3	Groundwater	TIN	Beryllium	ug/l					0.26 U	0.2 U	0.028 U	0.6 U	1 U	0.5 U	0.5 U	1 U		0.24 J	0.078 0.032	0.030 U
18/19	21-3	Groundwater	TIN	Cadmium	ug/l	1 U	2 U	5 U	2 U	0.2 J	0.2 U	0.053 U	0.3 U	2 U	0.2 U	0.2 U	1 U		3.1	0.055 0.051	0.030 U
18/19	21-3	Groundwater	TIN	Calcium	ug/l	19700	13900	11700	12300	18700	14900	19400	15300	14700	15600						
18/19	21-3	Groundwater	TIN	Chromium	ug/l	4 U	6 U	6 U	9 U	4 UJ	5 U	0.6 U	0.5 J	6.5 U	2.09	4.07	6.1		7.3	2.57 1.56	0.19 J
18/19	21-3	Groundwater	TIN	Cobalt	ug/l					5	10 U	0.043 U	0.5 U	0.8 U	1.04	2.32					

Table C-2-E
Summary of Chemicals in Groundwater at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	21-3	Groundwater	TIN	Copper	ug/l	17.7 J	4 U	3 U	3 U	15.5 J	2 U	1 J	2.8 J	6 U	5.4	8.22	14.6		41.6	6.24 2.99	0.24 U
18/19	21-3	Groundwater	TIN	Iron	ug/l	17200	8140	5470	5380	15500	8720	1300	8480	7780	10600						
18/19	21-3	Groundwater	TIN	Lead	ug/l	2.8 J	2.2 J	1 U	1 U	2.3	0.2	0.036 U	1.6 U	2 U	0.826	1.16	1.87		7.1	1.390 0.648	0.036
18/19	21-3	Groundwater	TIN	Magnesium	ug/l	9100	4970 J	4080 J	4320 J	8580	5300	4170	4900 J	4710	5690						
18/19	21-3	Groundwater	TIN	Manganese	ug/l	590	371	264	295	481	323	23.3	311	274	312	279					
18/19	21-3	Groundwater	TIN	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		0.0180 UJ	0.20 U 0.20 U	0.20 U
18/19	21-3	Groundwater	TIN	Nickel	ug/l					5.4 J	20 U	1.5 J	1.1 J	4 U	2.24	3.28	5.51		9.6	1.72 0.88	0.48
18/19	21-3	Groundwater	TIN	Potassium	ug/l	2070 J	1670 J	2050 J	2090 J	1790	2000 U	1840	1510 J	1610	1510						
18/19	21-3	Groundwater	TIN	Selenium	ug/l	5 U	1 U	1 U	1 U	0.48 U	3	1.9 J	1.9 J	5 U	0.5 U	0.5 U	1 UJ		0.42 UJ	1.2 U 1.2 U	1.5 U
18/19	21-3	Groundwater	TIN	Silver	ug/l	3 U	3 U	3 U	3 U	4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	2.14 J	0.13 J		0.085 U	0.043 0.030 U	0.030 U
18/19	21-3	Groundwater	TIN	Sodium	ug/l	29500	25300	30400	31500	24200	23900	14800	16200 J		25900						
18/19	21-3	Groundwater	TIN	Thallium	ug/l					10 U	0.2 U	0.68 J	3.5 U	2 U	0.25 U	0.25 U	0.1 J		0.10 J	0.032 U 0.020 U	0.030 U
18/19	21-3	Groundwater	TIN	Vanadium	ug/l					68.5	10 U	1.5 J	2.6 J	20 U	18.9	25.4					
18/19	21-3	Groundwater	TIN	Zinc	ug/l	20.1	6.2 J	11.6 J	5.8 J	38.1 U	10 U	4.1 J	13.5 J	25 U	29.2	7.61	14.6		58.7	5.51 4.03	1.10
18/19	21-3	Groundwater	VOA	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U					
18/19	21-3	Groundwater	VOA	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U		1.0 U	2.0 U 2.0 U	
18/19	21-3	Groundwater	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	0.68 J	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U		1 UJ		1 U		2.5 U	10 U	10 U	5 U		1.0 U	2.0 U 2.0 U	
18/19	21-3	Groundwater	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U		1.0 U	2.0 U 2.0 U	
18/19	21-3	Groundwater	VOA	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	1,2-Dichloroethene	ug/l						0.5 U										
18/19	21-3	Groundwater	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	1,3-Dichloro-2-propanol	ug/l	50 U	100 U	100 U													
18/19	21-3	Groundwater	VOA	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	

Table C-2-E
Summary of Chemicals in Groundwater at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	21-3	Groundwater	VOA	1,3-Dichloropropane	ug/l		1 U	1 U	1 U	1 U	0.5 U			1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U												
18/19	21-3	Groundwater	VOA	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U	5 U													
18/19	21-3	Groundwater	VOA	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	1,4-Dioxane	ug/l	250 U	250 U	250 U													
18/19	21-3	Groundwater	VOA	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	2-Butanone	ug/l	16	5 U	5 U	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U		5.0 U		
18/19	21-3	Groundwater	VOA	2-Chloroethyl vinyl ether	ug/l	26 J	10 U	10 U						10 U	10 U	10 U					
18/19	21-3	Groundwater	VOA	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 UJ	20 U	5 U	5 U	10 U	20 U	20 U	10 U		5.0 U		
18/19	21-3	Groundwater	VOA	2-Nitropropane	ug/l	10 U	10 U	10 U													
18/19	21-3	Groundwater	VOA	3-chloropropene	ug/l	5 U	5 U	5 U													
18/19	21-3	Groundwater	VOA	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U		1.0 U		
18/19	21-3	Groundwater	VOA	4-Methyl-2-pentanone	ug/l	16	5 U	5 U	5 U	5 UJ	20 U	5 U	5 U	10 U	20 U	20 U	5 U		5.0 U		
18/19	21-3	Groundwater	VOA	Acetone	ug/l	86	5 U	5 U	5 U	4.1 J	20 U	5 U	5 U		50 U	50 U	25 U		5.0 U	20 UJ 20 UJ	
18/19	21-3	Groundwater	VOA	Acetonitrile	ug/l	5 U	5 U	5 U													
18/19	21-3	Groundwater	VOA	Acrolein	ug/l	100 U	25 U	25 U													
18/19	21-3	Groundwater	VOA	Acrylonitrile	ug/l	50 U	10 U	10 U							10 U	10 U					
18/19	21-3	Groundwater	VOA	Benzene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Benzyl chloride	ug/l	5 U	5 U	5 U													
18/19	21-3	Groundwater	VOA	Bromoacetone	ug/l	2000 U	2000 U	2000 U													
18/19	21-3	Groundwater	VOA	Bromobenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Bromochloromethane	ug/l					1 UJ		1 U		1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U		1.0 U		
18/19	21-3	Groundwater	VOA	BTEX (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U										
18/19	21-3	Groundwater	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Chloromethane	ug/l	14	1 U	25	1 U	1 UJ	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Chloroprene	ug/l	50 U	10 U	10 U													
18/19	21-3	Groundwater	VOA	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ		1 U	1 U	1 U	2 U	2 U	0.21 J		1.0 U	0.25 J 0.21 J	
18/19	21-3	Groundwater	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	5 U	5 U	5 U		1.0 U		
18/19	21-3	Groundwater	VOA	Diethyl ether	ug/l	10 U	10 U	10 U													
18/19	21-3	Groundwater	VOA	Ethyl methacrylate	ug/l	5 U	5 U	5 U													
18/19	21-3	Groundwater	VOA	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Ethylene oxide	ug/l	250 U	25 U	25 U													

Table C-2-E
Summary of Chemicals in Groundwater at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	21-3	Groundwater	VOA	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U		1.0 U		
18/19	21-3	Groundwater	VOA	Hexachloroethane	ug/l	10 U	10 U	10 U													
18/19	21-3	Groundwater	VOA	Iodomethane	ug/l	5 U	5 U	5 U							5 U	5 U					
18/19	21-3	Groundwater	VOA	Isobutyl alcohol	ug/l	44 J	100 U	100 U													
18/19	21-3	Groundwater	VOA	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U		1.0 U		
18/19	21-3	Groundwater	VOA	LPAH (total)	ug/l	1 U	1 U	1 U													
18/19	21-3	Groundwater	VOA	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				1 J		2 U	2 U	2 U		2.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Malononitrile	ug/l	1000000 U															
18/19	21-3	Groundwater	VOA	Methacrylonitrile	ug/l	5 U	5 U	5 U													
18/19	21-3	Groundwater	VOA	Methyl methacrylate	ug/l	5 U	5 U	5 U													
18/19	21-3	Groundwater	VOA	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Methylene chloride	ug/l	1 U	1 U	1 U	1 U	2 UJ	1 U	2 U	1 U	5 U	5 U	1.2 U	5 U		1.0 U	2.0 U 2.0 U	
18/19	21-3	Groundwater	VOA	Naphthalene	ug/l	1 U	1 U	1 U						2 U	1.6 J	2 U	2 U		1.0 U		
18/19	21-3	Groundwater	VOA	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U		1.0 U		
18/19	21-3	Groundwater	VOA	NCPAH (total)	ug/l	1 U	1 U	1 U													
18/19	21-3	Groundwater	VOA	Nitrobenzene	ug/l	100 U	25 U	25 U													
18/19	21-3	Groundwater	VOA	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Propargyl alcohol	ug/l	1000 U	1000 U	1000 U													
18/19	21-3	Groundwater	VOA	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Toluene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	0.25 J		1.0 U	0.51 U 0.50 U	
18/19	21-3	Groundwater	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ		1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U	5 U							10 U	10 U					
18/19	21-3	Groundwater	VOA	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.30 J 0.30 J	
18/19	21-3	Groundwater	VOA	Trichlorofluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-3	Groundwater	VOA	Vinyl acetate	ug/l	10 U	5 U	5 U							5 U	5 U					
18/19	21-3	Groundwater	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U		1.0 U	0.50 U 0.50 U	
18/19	21-3	Groundwater	VOA	Xylenes	ug/l					1 UJ	0.5 U	1 U		2 U						1.0 U 1.0 U	
18/19	21-3	Groundwater	VOA	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U									1.0 U 1.0 U	
18/19	21-4	Groundwater	DIN	Aluminum	ug/l										11.1	9.83				14.8	
18/19	21-4	Groundwater	DIN	Antimony	ug/l										0.101	0.151	1 U		0.26 J	0.090 U	0.05 UJ
18/19	21-4	Groundwater	DIN	Arsenic	ug/l										0.376	0.199	1 U		0.10 U	0.37 B	0.50 U
18/19	21-4	Groundwater	DIN	Barium	ug/l										0.774	0.745	0.77 J		1.4 U	0.83	0.82
18/19	21-4	Groundwater	DIN	Beryllium	ug/l										0.15 U	0.15 U	1 U		0.043 U	0.020 U	0.030 U
18/19	21-4	Groundwater	DIN	Cadmium	ug/l										0.2 U	0.2 U	1 U		0.094 U	0.020 U	0.012 J
18/19	21-4	Groundwater	DIN	Calcium	ug/l										7740	7800					
18/19	21-4	Groundwater	DIN	Chromium	ug/l										1.74	0.649	1 U		0.50 J	0.20 U	0.20 U
18/19	21-4	Groundwater	DIN	Cobalt	ug/l										0.5 U	3.74					
18/19	21-4	Groundwater	DIN	Copper	ug/l										0.603	1.96	2 U		0.52 UJ	0.10 U	0.26 U

Table C-2-E
Summary of Chemicals in Groundwater at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	21-4	Groundwater	DIN	Iron	ug/l										50 U	130					
18/19	21-4	Groundwater	DIN	Lead	ug/l										0.1 U	0.1 U	1 UJ		0.075 U	0.030 U	0.030 U
18/19	21-4	Groundwater	DIN	Magnesium	ug/l										2510	2100					
18/19	21-4	Groundwater	DIN	Manganese	ug/l										8.35	12.1					
18/19	21-4	Groundwater	DIN	Mercury	ug/l											0.2 U	0.2 U		0.0260 UJ	0.20 U	0.20 UJ
18/19	21-4	Groundwater	DIN	Nickel	ug/l										0.541	0.561	2 U		0.44 J	0.20 U	0.56
18/19	21-4	Groundwater	DIN	Potassium	ug/l										693	2500 U					
18/19	21-4	Groundwater	DIN	Selenium	ug/l										0.709	0.5 U	1 U		0.11 U	1.2 U	1.5 U
18/19	21-4	Groundwater	DIN	Silver	ug/l										0.1 U	0.1 UJ	1 U		0.085 U	0.030 U	0.030 U
18/19	21-4	Groundwater	DIN	Sodium	ug/l										10400	10000					
18/19	21-4	Groundwater	DIN	Thallium	ug/l										0.448	0.05 U	1 U		0.044 U	0.020 U	0.030 U
18/19	21-4	Groundwater	DIN	Vanadium	ug/l										5 U	5 U					
18/19	21-4	Groundwater	DIN	Zinc	ug/l										27.5	2.45	5 UJ		2.0 J	0.50 U	0.65 J
18/19	21-4	Groundwater	TIN	Aluminum	ug/l					100 U	50 U	83 J	134 J	15300	47.7	251				324	
18/19	21-4	Groundwater	TIN	Antimony	ug/l					5 U	0.2 U	0.087 U	1.6 U	1 U	0.5 U	0.5 U	1 U		0.056 U	0.090 U	0.05 UJ
18/19	21-4	Groundwater	TIN	Arsenic	ug/l	1.3 J	1 U	1 U	1 U	2 U	2 U	1.6 J	2.9 U	8.41	1 U	1 U	1 U		0.15 J	0.72	0.50 U
18/19	21-4	Groundwater	TIN	Barium	ug/l	2.6 J	6 J	4 U	2.5 J	0.91 U	5 U	6.7 J	1 J	56.7	0.878	1.28	0.93 J		1.2 U	2.57	0.84
18/19	21-4	Groundwater	TIN	Beryllium	ug/l					0.26 U	0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.5 UJ	1 U		0.043 U	0.020 U	0.030 U
18/19	21-4	Groundwater	TIN	Cadmium	ug/l	1 U	2 U	5 U	2 U	0.057 UJ	0.2 U	0.083 J	0.3 U	2 U	0.2 U	0.2 U	1 U		0.094 U	0.020 U	0.011 J
18/19	21-4	Groundwater	TIN	Calcium	ug/l	8050	8010	7460	7570	7090	8360	8100	7790	11300	7920						
18/19	21-4	Groundwater	TIN	Chromium	ug/l	4.3 J	8.6 J	6 U	9 U	4 UJ	5 U	0.6 U	0.5 J	32.8	0.1 U	0.363 J	0.85 J		0.56 J	0.20 U	0.20 U
18/19	21-4	Groundwater	TIN	Cobalt	ug/l					4 U	10 U	0.31 J	0.5 U	2.16	0.1 U	0.1 U					
18/19	21-4	Groundwater	TIN	Copper	ug/l	2 J	4 U	3 U	3 U	4 UJ	2 U	0.7 J	1.1 U	26.9	0.5 U	0.5 U	2 U		2.7	0.61	0.13 U
18/19	21-4	Groundwater	TIN	Iron	ug/l	37.6 J	139	36.7 J	15.6 J	100 U	60	619	79.7 J	15100	50 U						
18/19	21-4	Groundwater	TIN	Lead	ug/l	1 U	1.7 J	1 U	1 U	0.019 UJ	0.2 U	0.32 J	1.6 U	6.68	0.15 U	0.15 U	1 U		0.075 U	0.127	0.030 U
18/19	21-4	Groundwater	TIN	Magnesium	ug/l	2180	2120 J	2060 J	2040 J	2060	2290	2280	2110 J	2570	2280						
18/19	21-4	Groundwater	TIN	Manganese	ug/l	12.3 J	11.4 J	11.4 J	11 J	9.6 J	12	302	10.8 J	354	9.66	10.3					
18/19	21-4	Groundwater	TIN	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U		0.0260 U	0.20 U	0.20 U
18/19	21-4	Groundwater	TIN	Nickel	ug/l					4 U	20 U	1.1 U	0.7 U	19.3	0.545	0.5 U	2 U		0.46 J	0.20 U	0.30
18/19	21-4	Groundwater	TIN	Potassium	ug/l	791 J	809 J	1000 J	932 J	640 J	2000 U	686 J	549 J	1100	625						
18/19	21-4	Groundwater	TIN	Selenium	ug/l	1 U	1 U	1 U	1 U	3 U	2	0.98 J	1.2 J	5 U	0.5 U	0.5 U	1 UJ		0.47 J	1.2 U	1.5 U
18/19	21-4	Groundwater	TIN	Silver	ug/l	3 U	3 U	3 U	3 U	4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	0.35 U	1 U		0.085 U	0.030 U	0.030 U
18/19	21-4	Groundwater	TIN	Sodium	ug/l	11500	10900	10700	10200	10100	11600	11000	7930		11300						
18/19	21-4	Groundwater	TIN	Thallium	ug/l					10 U	0.2 U	0.012 U	3.5 U	2 U	0.25 U	0.25 U	1 U		0.044 U	0.025 U	0.023 J
18/19	21-4	Groundwater	TIN	Vanadium	ug/l					3 U	10 U	4.9 J	1.5 J	35.9	1.67	2.19					
18/19	21-4	Groundwater	TIN	Zinc	ug/l	4.4 J	8.3 J	6.4 J	5.8 J	20 U	10 U	2.9 J	8.3 J	25 U	20.8	1.23	5 U		1.8 U	3.74	0.59 J
18/19	21-4	Groundwater	VOA	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U					
18/19	21-4	Groundwater	VOA	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U		1.0 UJ		
18/19	21-4	Groundwater	VOA	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U		1.0 U	2.0 U	
18/19	21-4	Groundwater	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U		1 U		1 U		2.5 U	10 U	10 U	5 U		1.0 U	2.0 U	
18/19	21-4	Groundwater	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	2.0 U	
18/19	21-4	Groundwater	VOA	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	1,2-Dichloroethene	ug/l						0.5 U										
18/19	21-4	Groundwater	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U		1.0 U	0.50 U	

Table C-2-E
Summary of Chemicals in Groundwater at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	21-4	Groundwater	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	1,3-Dichloro-2-propanol	ug/l	50 U	100 U	100 U													
18/19	21-4	Groundwater	VOA	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U										
18/19	21-4	Groundwater	VOA	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U	5 U													
18/19	21-4	Groundwater	VOA	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	1,4-Dioxane	ug/l	250 U	250 U	250 U													
18/19	21-4	Groundwater	VOA	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	2-Butanone	ug/l	18	5 U	5 U	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U		5.0 U		
18/19	21-4	Groundwater	VOA	2-Chloroethyl vinyl ether	ug/l	41 J	10 U	10 U						10 U	10 U	10 U					
18/19	21-4	Groundwater	VOA	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	10 U		5.0 UJ		
18/19	21-4	Groundwater	VOA	2-Nitropropane	ug/l	10 U	10 U	10 U													
18/19	21-4	Groundwater	VOA	3-chloropropene	ug/l	5 U	5 U	5 U													
18/19	21-4	Groundwater	VOA	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U		1.0 U		
18/19	21-4	Groundwater	VOA	4-Methyl-2-pentanone	ug/l	20	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	5 U		5.0 U		
18/19	21-4	Groundwater	VOA	Acetone	ug/l	100	5 U	5 U	5 U		20 U	5 U	5 U		50 U	50 U	25 U		5.0 U	20 UJ	
18/19	21-4	Groundwater	VOA	Acetonitrile	ug/l	5 U	5 U	5 U													
18/19	21-4	Groundwater	VOA	Acrolein	ug/l	100 U	25 U	25 U													
18/19	21-4	Groundwater	VOA	Acrylonitrile	ug/l	50 U	10 U	10 U							10 U	10 U					
18/19	21-4	Groundwater	VOA	Benzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Benzyl chloride	ug/l	5 U	5 U	5 U													
18/19	21-4	Groundwater	VOA	Bromoacetone	ug/l	2000 U	2000 U	2000 U													
18/19	21-4	Groundwater	VOA	Bromobenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Bromochloromethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U		1.0 U		
18/19	21-4	Groundwater	VOA	BTEX (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U										
18/19	21-4	Groundwater	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	0.57 J	0.5 U	1 U	1 U	10 U	2 U	2 U	10 UJ		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Chloromethane	ug/l	18	1 U	19	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Chloroprene	ug/l	50 U	10 U	10 U													
18/19	21-4	Groundwater	VOA	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	5 U	5 U	5 U		1.0 UJ		
18/19	21-4	Groundwater	VOA	Diethyl ether	ug/l	10 U	10 U	10 U													
18/19	21-4	Groundwater	VOA	Ethyl methacrylate	ug/l	5 U	5 U	5 U													
18/19	21-4	Groundwater	VOA	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Ethylene oxide	ug/l	250 U	25 U	25 U													
18/19	21-4	Groundwater	VOA	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U		1.0 UJ		
18/19	21-4	Groundwater	VOA	Hexachloroethane	ug/l	10 U	10 U	10 U													
18/19	21-4	Groundwater	VOA	Iodomethane	ug/l	5 U	5 U	5 U							5 U	5 U					
18/19	21-4	Groundwater	VOA	Isobutyl alcohol	ug/l	55 J	100 U	100 U													
18/19	21-4	Groundwater	VOA	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U		1.0 U		
18/19	21-4	Groundwater	VOA	LPAH (total)	ug/l	1 U	1 U	1 U													
18/19	21-4	Groundwater	VOA	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				0.9 J		2 U	2 U	2 U		2.0 U	0.50 U	

Table C-2-E
Summary of Chemicals in Groundwater at White Alice Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration															
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2008	9/2010
18/19	21-4	Groundwater	VOA	Malononitrile	ug/l	1000000 U															
18/19	21-4	Groundwater	VOA	Methacrylonitrile	ug/l	5 U	5 U	5 U													
18/19	21-4	Groundwater	VOA	Methyl methacrylate	ug/l	5 U	5 U	5 U													
18/19	21-4	Groundwater	VOA	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Methylene chloride	ug/l	1 U	1 U	1 U	1 U	2 U	1 U	2 U	1 U	5 U	5 U	1 U	5 U		1.0 U	0.11 J	
18/19	21-4	Groundwater	VOA	Naphthalene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	2 U		1.0 U		
18/19	21-4	Groundwater	VOA	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U		1.0 U		
18/19	21-4	Groundwater	VOA	NCPAH (total)	ug/l	1 U	1 U	1 U													
18/19	21-4	Groundwater	VOA	Nitrobenzene	ug/l	100 U	25 U	25 U													
18/19	21-4	Groundwater	VOA	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Propargyl alcohol	ug/l	1000 U	1000 U	1000 U													
18/19	21-4	Groundwater	VOA	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Toluene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	1.1 U	
18/19	21-4	Groundwater	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U	5 U							10 U	10 U					
18/19	21-4	Groundwater	VOA	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Trichlorofluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	2 U	2 U	1 U		1.0 U		
18/19	21-4	Groundwater	VOA	Vinyl acetate	ug/l	10 U	5 U	5 U							5 U	5 U					
18/19	21-4	Groundwater	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U		1.0 U	0.50 U	
18/19	21-4	Groundwater	VOA	Xylenes	ug/l					1 U	0.5 U	1 U		2 U						1.0 U	
18/19	21-4	Groundwater	VOA	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U									1.0 U	

Notes:

Blank cells in the concentration columns indicate that a sample was not collected from that location or the sample was not analyzed for that chemical.
J - estimated value
U - not detected, value shown is the quantitation limit
UJ - Estimated quantitation limit
ug/l - microgram/liter

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW01	Surface Water	DIN	Aluminum	ug/l											6.33		6.52	32.0 U	1.5 J	8.5	4.4	10.0		
25	RLSW01	Surface Water	DIN	Antimony	ug/l											0.393	1 U	1 U	0.056 U	0.14	0.093	0.090 U	0.092		
25	RLSW01	Surface Water	DIN	Arsenic	ug/l											0.518	1 U	1 U	0.32 J	1.76	1.20	0.3 J	0.3 J		
25	RLSW01	Surface Water	DIN	Barium	ug/l											19.1									
25	RLSW01	Surface Water	DIN	Beryllium	ug/l											0.15 U	1 U	1 U	0.043 U	0.020 U	0.020 U	0.020 U	0.030 U		
25	RLSW01	Surface Water	DIN	Cadmium	ug/l											0.2 U	1 U	0.1 U	0.094 U	0.016 J	0.020 U	0.020 U	0.015 J		
25	RLSW01	Surface Water	DIN	Calcium	ug/l											45000									
25	RLSW01	Surface Water	DIN	Chromium	ug/l											1.13	1 U	1 U	1.00 U	0.36 J	0.25 U	0.07 J	0.11 J		
25	RLSW01	Surface Water	DIN	Cobalt	ug/l											4.97									
25	RLSW01	Surface Water	DIN	Copper	ug/l											2.42	2.02	1.68 J	2.0 J	0.73 J	1.70	1.14	1.97		
25	RLSW01	Surface Water	DIN	Iron	ug/l											55									
25	RLSW01	Surface Water	DIN	Lead	ug/l											0.1 U	1 U	1 U	0.075 U	0.030 U	0.030 U	0.030 U	0.030 U		
25	RLSW01	Surface Water	DIN	Magnesium	ug/l											12000									
25	RLSW01	Surface Water	DIN	Manganese	ug/l											8.66									
25	RLSW01	Surface Water	DIN	Mercury	ug/l											0.2 U	0.2 U	0.2 U	0.0260 UJ	0.20 U	0.20 U	0.20 U	0.20 U		
25	RLSW01	Surface Water	DIN	Nickel	ug/l											1.39	1.88 UJ	2 U	1.7 J	2.01	0.60 U	0.58	0.36		
25	RLSW01	Surface Water	DIN	Potassium	ug/l											3300									
25	RLSW01	Surface Water	DIN	Selenium	ug/l											0.5 U	1.24 U	2 U	1.0 UJ	1.0 U	1.2 U	1.2 U	0.3 J		
25	RLSW01	Surface Water	DIN	Silver	ug/l											0.1 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.030 U		
25	RLSW01	Surface Water	DIN	Sodium	ug/l											14000									
25	RLSW01	Surface Water	DIN	Thallium	ug/l											0.05 U	0.04 UJ	1 U	0.044 U	0.020 U	0.020 U	0.020 U	0.030 U		
25	RLSW01	Surface Water	DIN	Vanadium	ug/l											5 U									
25	RLSW01	Surface Water	DIN	Zinc	ug/l											108	52.8	48.1	229 J	23.2	84.3	58.7	87.9		
25	RLSW01	Surface Water	TIN	Aluminum	ug/l					954	50 U	123	80.6 U	1090	13.4	27.4		12.9	49.4 J	2.3	35.8	61.3	26.1		
25	RLSW01	Surface Water	TIN	Antimony	ug/l					5 U	0.2	0.27 J	1.6 U	1 U	0.5 U	0.5 U	0.21 J	1 U	0.21 UJ	0.10	0.084 J	0.090 U	0.095		
25	RLSW01	Surface Water	TIN	Arsenic	ug/l	59.9	1.6 J	8.7	1 U	2 U	2 U	1.2 J	2.9 U	5 U	1 U	1 U	1 U	0.546 J	0.48 J	1.98	1.36	0.4 J	0.3 J		
25	RLSW01	Surface Water	TIN	Barium	ug/l	39.2 J	62.6 J	25.8 J	43.5 J	20.2	19	15.6 J	13.6 J	13.3	13.3	18.2									
25	RLSW01	Surface Water	TIN	Beryllium	ug/l					0.26 U	0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U	0.020 U	0.020 U	0.030 U		
25	RLSW01	Surface Water	TIN	Cadmium	ug/l	1 U	2 U	5 U	2 U	0.24 J	0.2 U	0.16 J	0.4 J	2 U	0.2 U	0.2 U	1 U	0.1 U	0.094 U	0.014 J	0.028 U	0.022 U	0.020 J		
25	RLSW01	Surface Water	TIN	Calcium	ug/l	59200	114000	32000	51700	24400	29900	34500	30900	28400	30100										
25	RLSW01	Surface Water	TIN	Chromium	ug/l	4 U	7.9 J	6 U	14.4	4 UJ	5 U	1.3 J	0.4 U	6 U	0.1 U	0.262	1 U	1 U	1.00 U	0.38 J	0.27 U	0.12 J	0.16 J		
25	RLSW01	Surface Water	TIN	Cobalt	ug/l					4 U	10 U	0.58 J	0.5 U	0.8 U	0.1 U	0.1 U									
25	RLSW01	Surface Water	TIN	Copper	ug/l	7.9 J	5.2 J	3.2 J	4.1 J	6.1 J	2	3 J	1.3 J	6.1	1.89	2.06 J	1.98 J	1.92 J	2.0 J	0.88 J	1.87	1.64	2.19		
25	RLSW01	Surface Water	TIN	Iron	ug/l	3040	5480	269	1090	989	250	893	90.7 J	1160	70.3										
25	RLSW01	Surface Water	TIN	Lead	ug/l	1 U	1 U	1 U	1 U	2 U	0.2 U	0.19 J	1.6 U	2 U	0.15 U	0.15 U	1 U	1 U	0.13 J	0.030 U	0.073	0.066	0.008 J		
25	RLSW01	Surface Water	TIN	Magnesium	ug/l	12500	25100	7670	12900	6840	8330	9310	7300	5770	9060										
25	RLSW01	Surface Water	TIN	Manganese	ug/l	2680	1700	431	397	219	46	212	25.1	59	21.3	3.72									
25	RLSW01	Surface Water	TIN	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.26	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0260 UJ	0.20 U	0.20 U	0.20 U	0.20 U		
25	RLSW01	Surface Water	TIN	Nickel	ug/l					4 U	20 U	2 J	1.3 J	2 U	1.93	1.54	0.44 J	2 U	1.8 J	1.74	0.83	0.64	0.35		
25	RLSW01	Surface Water	TIN	Potassium	ug/l	5050	3760 J	3540 J	3520 J	3990	2000 U	3510	2500 J	3080	3620										
25	RLSW01	Surface Water	TIN	Selenium	ug/l	1 U	1 U	1 U	1 U	3 U	4	3.4	1.1 U	5 U	0.5 U	0.5 U	1 U	2 U	1.3 UJ	1.0 U	1.2 U	1.2 U	1.5 U		
25	RLSW01	Surface Water	TIN	Silver	ug/l	3 U	3 U	3 U	3 U	4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	0.35 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.030 U		
25	RLSW01	Surface Water	TIN	Sodium	ug/l	18500	15200	11000	14400	15700	13200	10800	10900		10600										
25	RLSW01	Surface Water	TIN	Thallium	ug/l					10 U	0.2 U	0.19 J	3.5 U	2 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U	0.020 U	0.020 U	0.030 U		
25	RLSW01	Surface Water	TIN	Vanadium	ug/l					3 U	10 U	0.7 J	0.3 U	20 U	1 U	1 U									
25	RLSW01	Surface Water	TIN	Zinc	ug/l	2020	425	673	183	270	223	259	1290	85.4	283	115	57.3	50.8	255 J	21.9	106	67.8	90.5		
25	RLSW01	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U									
25	RLSW01	Surface Water	VOA	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 UJ	2.0 U					
25	RLSW01	Surface Water	VOA	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U			
25	RLSW01	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U		1 UJ		1 U		2.5 U	10 U	10 U	5 U	5 U	1.0 U	2.0 U		2.0 U			
25	RLSW01	Surface Water	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U			
25	RLSW01	Surface Water	VOA	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	1,2-Dichloroethene	ug/l						0.5 U														

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW01	Surface Water	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	1,3-Dichloro-2-propanol	ug/l	50 U	100 U	100 U																	
25	RLSW01	Surface Water	VOA	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.17 J		0.50 U			
25	RLSW01	Surface Water	VOA	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1													
25	RLSW01	Surface Water	VOA	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U	5 U																	
25	RLSW01	Surface Water	VOA	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	1,4-Dioxane	ug/l	250 U	250 U	250 U																	
25	RLSW01	Surface Water	VOA	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	2-Butanone	ug/l	5 U	5 U	5 U	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U	10 U	5.0 U	20 UR					
25	RLSW01	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l	50 U	10 U	10 U						10 U	10 U	10 U									
25	RLSW01	Surface Water	VOA	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 UJ	20 U	5 U	5 U	10 U	20 U	20 U	10 U	10 U	5.0 UJ	20 UR					
25	RLSW01	Surface Water	VOA	2-Nitropropane	ug/l	10 U	10 U	10 U																	
25	RLSW01	Surface Water	VOA	3-chloropropene	ug/l	5 U	5 U	5 U																	
25	RLSW01	Surface Water	VOA	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	5 U	5 UJ	20 U	5 U	5 U	10 U	20 U	20 U	5 U	5 U	5.0 U	20 UR					
25	RLSW01	Surface Water	VOA	Acetone	ug/l	7.1	5 U	5 U	5 U		20 U	5 U	5 U		50 U	50 U	25 U	25 U	5.0 U	20 UR		20 U			
25	RLSW01	Surface Water	VOA	Acetonitrile	ug/l	5 U	5 U	5 U																	
25	RLSW01	Surface Water	VOA	Acrolein	ug/l	100 U	25 U	25 U																	
25	RLSW01	Surface Water	VOA	Acrylonitrile	ug/l	50 U	10 U	10 U							10 U	10 U									
25	RLSW01	Surface Water	VOA	Benzene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	Benzyl chloride	ug/l	5 U	5 U	5 U																	
25	RLSW01	Surface Water	VOA	Bromoacetone	ug/l	2000 U	2000 U	2000 U																	
25	RLSW01	Surface Water	VOA	Bromobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	Bromochloromethane	ug/l					1 UJ		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ					
25	RLSW01	Surface Water	VOA	BTEX (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1													
25	RLSW01	Surface Water	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	1.9 J	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U	10 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.0 U	0.39 J		0.50 U			
25	RLSW01	Surface Water	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	Chloromethane	ug/l	1 U	1 U	11	1 U	1 UJ	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U		0.060 J			
25	RLSW01	Surface Water	VOA	Chloroprene	ug/l	50 U	10 U	10 U																	
25	RLSW01	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.16 J		0.50 U			
25	RLSW01	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	5 U	5 U	5 U	5 U	1.0 UJ	0.50 UJ					
25	RLSW01	Surface Water	VOA	Diethyl ether	ug/l	10 U	10 U	10 U																	
25	RLSW01	Surface Water	VOA	Ethyl methacrylate	ug/l	5 U	5 U	5 U																	
25	RLSW01	Surface Water	VOA	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	Ethylene oxide	ug/l	250 U	25 U	25 U																	
25	RLSW01	Surface Water	VOA	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U	4 U	1.0 UJ	2.0 U					
25	RLSW01	Surface Water	VOA	Hexachloroethane	ug/l	10 U	10 U	10 U																	
25	RLSW01	Surface Water	VOA	Iodomethane	ug/l	5 U	5 U	5 U							5 U	5 U									
25	RLSW01	Surface Water	VOA	Isobutyl alcohol	ug/l	100 U	100 U	100 U																	
25	RLSW01	Surface Water	VOA	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	LPAH (total)	ug/l	0.58	1 U	1 U																	
25	RLSW01	Surface Water	VOA	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	2 U	2 U	2.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	Malononitrile	ug/l	1000000 U																			
25	RLSW01	Surface Water	VOA	Methacrylonitrile	ug/l	5 U	5 U	5 U																	
25	RLSW01	Surface Water	VOA	Methyl methacrylate	ug/l	5 U	5 U	5 U																	
25	RLSW01	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	Methylene chloride	ug/l	1 U	1 U	1 U	1 U	2 UJ	1 U	2 U	1 U	5 U	5 U	0.85 U	5 U	2 U	1.0 U	2.0 U		2.0 U			
25	RLSW01	Surface Water	VOA	Naphthalene	ug/l	0.58 J	1 U	1 U						2 U	2 U	2 U	0.17 J	2 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U	5 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	NCPAH (total)	ug/l	0.58	1 U	1 U																	

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW01	Surface Water	VOA	Nitrobenzene	ug/l	100 U	25 U	25 U																	
25	RLSW01	Surface Water	VOA	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	Propargyl alcohol	ug/l	1000 U	1000 U	1000 U																	
25	RLSW01	Surface Water	VOA	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW01	Surface Water	VOA	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	Toluene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.14 J		0.50 U			
25	RLSW01	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U	5 U							10 U	10 U									
25	RLSW01	Surface Water	VOA	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	Trichlorofluoromethane	ug/l	1 U	1 U	0.54 J					1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW01	Surface Water	VOA	Vinyl acetate	ug/l	10 U	5 U	5 U							5 U	5 U									
25	RLSW01	Surface Water	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW01	Surface Water	VOA	Xylenes	ug/l					1 UJ	0.5 U	1 U		2 U								1.0 U			
25	RLSW01	Surface Water	VOA	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1										1.0 U			
25	RLSW02	Surface Water	DIN	Aluminum	ug/l											11.5		24.6	32.0 U	6.2	7.0	5.8	10.8		
25	RLSW02	Surface Water	DIN	Antimony	ug/l											0.462	1 U	1 U	0.54 UJ	0.14	0.100	0.092	0.10 U		
25	RLSW02	Surface Water	DIN	Arsenic	ug/l											0.254	1 UJ	1 U	0.10 U	0.18 J	0.35 J	0.1 J	0.19 J		
25	RLSW02	Surface Water	DIN	Barium	ug/l											7.55									
25	RLSW02	Surface Water	DIN	Beryllium	ug/l											0.15 U	1 U	1 U	0.043 U	0.020 U	0.020 U	0.020 U	0.030 U		
25	RLSW02	Surface Water	DIN	Cadmium	ug/l											0.2 U	1 U	0.1 U	0.094 U	0.020 UJ	0.020 U	0.020 U	0.030 U		
25	RLSW02	Surface Water	DIN	Calcium	ug/l											23000									
25	RLSW02	Surface Water	DIN	Chromium	ug/l											1.24	1 U	1 U	1.00 U	0.28 J	0.25 U	0.05 J	0.10 J		
25	RLSW02	Surface Water	DIN	Cobalt	ug/l											6.46									
25	RLSW02	Surface Water	DIN	Copper	ug/l											7.82	4.61	2.93	2.8	2.51 J	2.82	2.70	3.55		
25	RLSW02	Surface Water	DIN	Iron	ug/l											260									
25	RLSW02	Surface Water	DIN	Lead	ug/l											0.333	1 U	1 U	0.075 U	0.030 U	0.030 U	0.030 U	0.014 J		
25	RLSW02	Surface Water	DIN	Magnesium	ug/l											3900									
25	RLSW02	Surface Water	DIN	Manganese	ug/l											11.6									
25	RLSW02	Surface Water	DIN	Mercury	ug/l											0.2 U	0.2 U	0.2 U	0.0260 UJ	0.20 U	0.20 U	0.20 U	0.20 U		
25	RLSW02	Surface Water	DIN	Nickel	ug/l											1.19	1.46 UJ	2 U	1.4 J	0.81 J	0.50 U	0.23	0.47		
25	RLSW02	Surface Water	DIN	Potassium	ug/l											2100									
25	RLSW02	Surface Water	DIN	Selenium	ug/l											0.5 U	1 U	2 U	0.52 UJ	1.0 U	1.2 U	1.2 U	1.5 U		
25	RLSW02	Surface Water	DIN	Silver	ug/l											0.1 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.006 J		
25	RLSW02	Surface Water	DIN	Sodium	ug/l											10000									
25	RLSW02	Surface Water	DIN	Thallium	ug/l											0.05 U	1 U	1 U	0.044 U	0.020 U	0.020 U	0.020 U	0.030 U		
25	RLSW02	Surface Water	DIN	Vanadium	ug/l											5 U									
25	RLSW02	Surface Water	DIN	Zinc	ug/l											5.07	5 U	5 U	3.8 J	2.36 J	0.81 U	0.3 J	0.83		
25	RLSW02	Surface Water	TIN	Aluminum	ug/l					17500	5860	595	80.6 U	200 U	31.1	20.1		24.9	32.0 U	15.5	13.5	19.3	15.0		
25	RLSW02	Surface Water	TIN	Antimony	ug/l					5 U	0.3	0.16 J	1.6 J	1 U	0.5 U	0.5 U	1 U	1 U	0.15 UJ	0.09 U	0.099	0.093	0.09 U		
25	RLSW02	Surface Water	TIN	Arsenic	ug/l	4.6 J		1 U		2 U	2 U	0.35 J	2.9 U	5 U	1 U	1 U	1 U	0.508 J	0.10 U	0.25 J	0.25 J	0.5 U	0.15 J		
25	RLSW02	Surface Water	TIN	Barium	ug/l	222		14.9 J		49.7	38	11.3 J	8.8 J	7.25	7.89	7.67									
25	RLSW02	Surface Water	TIN	Beryllium	ug/l					0.26 U	0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U	0.020 U	0.020 U	0.030 U		
25	RLSW02	Surface Water	TIN	Cadmium	ug/l	1 U		5 U		0.18 J	0.9	0.69 J	0.3 U	2 U	0.2 U	0.2 U	1 U	0.1 U	0.094 U	0.020 UJ	0.020 U	0.020 U	0.030 U		
25	RLSW02	Surface Water	TIN	Calcium	ug/l	95600		3100 J		32100	46300	35600	27800	21900	23000										
25	RLSW02	Surface Water	TIN	Chromium	ug/l	15.5		6 U		7.9 J	5	0.7 J	0.4 U	6 U	0.325	0.284	0.8 J	1 U	1.00 U	0.28 J	0.28 U	0.05 J	0.12 J		
25	RLSW02	Surface Water	TIN	Cobalt	ug/l					11.1	10 U	0.12 J	0.5 U	0.8 U	0.1 U	0.1 U									
25	RLSW02	Surface Water	TIN	Copper	ug/l	229		20.4 J		78.8	14	6	1.2 J	6 U	2.11	2.2 J	3.83	2.95	2.8	2.82 J	2.89	2.81	3.68		
25	RLSW02	Surface Water	TIN	Iron	ug/l	36300		88.5 J		14900	7280	597	48 J	1000 U	50 U										
25	RLSW02	Surface Water	TIN	Lead	ug/l	818		2.1 J		11	1.8	0.11 J	1.6 U	2 U	0.15 U	0.15 U	1 U	0.318 J	0.075 U	0.030 U	0.037 U	0.038 U	0.022 J		
25	RLSW02	Surface Water	TIN	Magnesium	ug/l	23800		1410 J		11800	10700	5520	4730 J	3530	4020										
25	RLSW02	Surface Water	TIN	Manganese	ug/l	6580		18.2		534	1190	60.8	38.8	4 U	7.69	1.98									
25	RLSW02	Surface Water	TIN	Mercury	ug/l	0.2 U		0.2 U		0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0260 UJ	0.20 U	0.20 U	0.20 U	0.20 U		
25	RLSW02	Surface Water	TIN	Nickel	ug/l					13.1 J	20 U	1.1 U	0.7 U	2 U	0.961	1.01	0.43 J	2 U	0.83 J	0.49 J	0.67 U	0.19 J	0.41		
25	RLSW02	Surface Water	TIN	Potassium	ug/l	10000		1380 J		2510	2400	2010	1740 J	1890	2020										
25	RLSW02	Surface Water	TIN	Selenium	ug/l	1 U		1 U		3 U	5	0.81 J	1.1 U	5 U	0.5 U	0.5 U	1 U	2 U	0.20 UJ	1.0 U	1.2 U	1.2 U	1.5 U		
25	RLSW02	Surface Water	TIN	Silver	ug/l	3 U		3 U		4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	0.35 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.030 U		
25	RLSW02	Surface Water	TIN	Sodium	ug/l	38100		5010		16000	17700	10400	14000		9160										
25	RLSW02	Surface Water	TIN	Thallium	ug/l					10 U	0.2 U	0.22 J	3.5 U	2 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U	0.020 U	0.020 U	0.030 U		
25	RLSW02	Surface Water	TIN	Vanadium	ug/l					41.1	17	2.2 J	0.3 J	20 U	1 U	1 U									

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW02	Surface Water	TIN	Zinc	ug/l	369		34.7		76.2	40	10.7	5.1 U	25 U	2.36	1.39	5 U	5 U	4.2 J	1.55 J	1.87	0.3 J	0.60 J		
25	RLSW02	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l	1 U		1 U						1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	1,1,1-Trichloroethane	ug/l	0.77 J		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	1,1,2-Trichloroethane	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U									
25	RLSW02	Surface Water	VOA	1,1-Dichloroethane	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	1,1-Dichloroethene	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 UJ	2.0 U					
25	RLSW02	Surface Water	VOA	1,2,3-Trichloropropane	ug/l	1 U		1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l	1 U		1 U				1 U		2 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U			
25	RLSW02	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U		1 U		1 U		1 U		2.5 U	10 U	10 U	5 U	5 U	1.0 U	2.0 U		2.0 U			
25	RLSW02	Surface Water	VOA	1,2-Dibromoethane	ug/l	1 U		1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U			
25	RLSW02	Surface Water	VOA	1,2-Dichlorobenzene	ug/l	1 U		1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	1,2-Dichloroethane	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	1,2-Dichloroethene	ug/l						0.5 U						1 U								
25	RLSW02	Surface Water	VOA	1,2-Dichloropropane	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	2 U	2 U	2 U		1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	1,3-Dichloro-2-propanol	ug/l	50 U		100 U																	
25	RLSW02	Surface Water	VOA	1,3-Dichlorobenzene	ug/l	1 U		1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.18 J		0.50 U			
25	RLSW02	Surface Water	VOA	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	1,3-Dichloropropene	ug/l	1 U		1 U		1 U	0.5 U														
25	RLSW02	Surface Water	VOA	1,4-Dichloro-2-butene(cis)	ug/l	50 U		5 U																	
25	RLSW02	Surface Water	VOA	1,4-Dichlorobenzene	ug/l	1 U		1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	1,4-Dioxane	ug/l	250 U		250 U																	
25	RLSW02	Surface Water	VOA	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	2-Butanone	ug/l	31		5 U		1.9 J	20 U	5 U	5 U	50 U	50 U	50 U	10 U	10 U	5.0 U	20 UR					
25	RLSW02	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l	50 U		10 U						10 U	10 U	10 U									
25	RLSW02	Surface Water	VOA	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	2-Hexanone	ug/l	5 U		5 U		5 U	20 U	5 U	5 U	10 U	20 U	20 U	10 U	10 U	5.0 UJ	20 UR					
25	RLSW02	Surface Water	VOA	2-Nitropropane	ug/l	10 U		10 U																	
25	RLSW02	Surface Water	VOA	3-chloropropene	ug/l	5 U		5 U																	
25	RLSW02	Surface Water	VOA	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	4-Methyl-2-pentanone	ug/l	5 U		5 U		5 U	20 U	5 U	5 U	10 U	20 U	20 U	5 U	5 U	5.0 U	20 UR					
25	RLSW02	Surface Water	VOA	Acetone	ug/l	46		5 U			20 U	5 U	5 U		50 U	50 U	25 U	25 U	5.0 U	20 UR		20 U			
25	RLSW02	Surface Water	VOA	Acetonitrile	ug/l	5 U		5 U																	
25	RLSW02	Surface Water	VOA	Acrolein	ug/l	100 U		25 U																	
25	RLSW02	Surface Water	VOA	Acrylonitrile	ug/l	50 U		10 U							10 U	10 U									
25	RLSW02	Surface Water	VOA	Benzene	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Benzyl chloride	ug/l	5 U		5 U																	
25	RLSW02	Surface Water	VOA	Bromoacetone	ug/l	2000 U		2000 U																	
25	RLSW02	Surface Water	VOA	Bromobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	Bromochloromethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	Bromodichloromethane	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	Bromoform	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	Bromomethane	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ					
25	RLSW02	Surface Water	VOA	BTEX (total)	ug/l	1 U		1 U		1 U	0.5 U														
25	RLSW02	Surface Water	VOA	Carbon disulfide	ug/l	1 U		1 U		1 UJ	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U	10 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Carbon tetrachloride	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Chlorobenzene	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Chloroethane	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Chloroform	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	Chloromethane	ug/l	1 U		21		1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Chloroprene	ug/l	50 U		10 U																	
25	RLSW02	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l	1 U		1 U		1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	Dibromochloromethane	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	Dibromomethane	ug/l	1 U		1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	Dichlorodifluoromethane	ug/l	1 U		1 U					1 U	1 U	5 U	5 U	5 U	5 U	1.0 UJ	0.50 UJ					
25	RLSW02	Surface Water	VOA	Diethyl ether	ug/l	10 U		10 U																	

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW02	Surface Water	VOA	Ethyl methacrylate	ug/l	5 U		5 U																	
25	RLSW02	Surface Water	VOA	Ethylbenzene	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Ethylene oxide	ug/l	250 U		25 U																	
25	RLSW02	Surface Water	VOA	Hexachlorobutadiene	ug/l	1 U		1 U						2 U	2 U	2 U	4 U	4 U	1.0 UJ	2.0 U					
25	RLSW02	Surface Water	VOA	Hexachloroethane	ug/l	10 U		10 U																	
25	RLSW02	Surface Water	VOA	Iodomethane	ug/l	5 U		5 U							5 U	5 U									
25	RLSW02	Surface Water	VOA	Isobutyl alcohol	ug/l	10 J		100 U																	
25	RLSW02	Surface Water	VOA	Isopropylbenzene	ug/l	1 U		1 U						1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	LPAH (total)	ug/l	1.2		1 U																	
25	RLSW02	Surface Water	VOA	m,p-Xylene	ug/l	1 U		1 U					1 U		2 U	2 U	2 U	2 U	2.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Malononitrile	ug/l	1000000 U																			
25	RLSW02	Surface Water	VOA	Methacrylonitrile	ug/l	5 U		5 U																	
25	RLSW02	Surface Water	VOA	Methyl methacrylate	ug/l	5 U		5 U																	
25	RLSW02	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	Methylene chloride	ug/l	1 U		1 U		2 U	1 U	2 U	1 U	5 U	5 U	1.6 U	5 U	2 U	1.0 U	2.0 U		2.0 U			
25	RLSW02	Surface Water	VOA	Naphthalene	ug/l	1.2		1 U						2 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U	5 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	NCPAH (total)	ug/l	1.2		1 U																	
25	RLSW02	Surface Water	VOA	Nitrobenzene	ug/l	100 U		25 U																	
25	RLSW02	Surface Water	VOA	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	o-Xylene	ug/l	1 U		1 U					1 U		2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Propargyl alcohol	ug/l	1000 U		1000 U																	
25	RLSW02	Surface Water	VOA	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	Styrene	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U					
25	RLSW02	Surface Water	VOA	Tetrachloroethene	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Toluene	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.13 J		0.50 U			
25	RLSW02	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l	1 U		1 U		1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l	5 U		5 U							10 U	10 U									
25	RLSW02	Surface Water	VOA	Trichloroethene	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Trichlorofluoromethane	ug/l	1 U		1 U					1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U					
25	RLSW02	Surface Water	VOA	Vinyl acetate	ug/l	10 U		5 U							5 U	5 U									
25	RLSW02	Surface Water	VOA	Vinyl chloride	ug/l	1 U		1 U		1 U	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U	1 U	1.0 U	0.50 U		0.50 U			
25	RLSW02	Surface Water	VOA	Xylenes	ug/l					1 U	0.5 U	1 U		2 U								1.0 U			
25	RLSW02	Surface Water	VOA	Xylenes (total)	ug/l	1 U		1 U		1 U	0.5 U											1.0 U			
25	RLSW03	Surface Water	DIN	Aluminum	ug/l											1920		802	850	1600 1570	3670 3540	1070 1010	2370	2610	356
25	RLSW03	Surface Water	DIN	Antimony	ug/l											0.259	1 U	1 U	0.19 UJ	0.09 U 0.09 U	0.090 U 0.090 U	0.090 U 0.090 U	0.05 UJ	0.05 U	0.05 U
25	RLSW03	Surface Water	DIN	Arsenic	ug/l											0.313	1 U	1 U	0.11 J	0.76 0.68	0.60 0.64	0.5 U 0.1 J	0.50 U	0.18 J	0.12 J
25	RLSW03	Surface Water	DIN	Barium	ug/l											13.9									
25	RLSW03	Surface Water	DIN	Beryllium	ug/l											0.15 U	1 U	1 U	0.043 U	0.045 0.042	0.067 0.062	0.035 0.037	0.083	0.059	0.033
25	RLSW03	Surface Water	DIN	Cadmium	ug/l											0.2 U	1 U	0.1 U	0.094 U	0.066 0.064	0.118 0.128	0.059 0.062	0.112	0.092	0.056
25	RLSW03	Surface Water	DIN	Calcium	ug/l											21000									
25	RLSW03	Surface Water	DIN	Chromium	ug/l											0.55	1 U	1 U	1.00 U	0.20 J 0.22 J	0.20 U 0.20 U	0.03 J 0.03 J	0.20 U	0.04 J	0.06 J
25	RLSW03	Surface Water	DIN	Cobalt	ug/l											18.4									
25	RLSW03	Surface Water	DIN	Copper	ug/l											157	73.2	120	86.6	141 J 134 J	161.0 J 156.0 J	118 117	153	150	77.5
25	RLSW03	Surface Water	DIN	Iron	ug/l											320									
25	RLSW03	Surface Water	DIN	Lead	ug/l											0.676	1 U	0.367 J	0.33 J	0.380 0.369	1.740 1.730	0.781 0.743	1.430	1.230	0.454
25	RLSW03	Surface Water	DIN	Magnesium	ug/l											2900									
25	RLSW03	Surface Water	DIN	Manganese	ug/l											146									
25	RLSW03	Surface Water	DIN	Mercury	ug/l											0.2 U	0.2 U	0.2 U	0.0260 UJ	0.20 U 0.20 U	0.20 U 0.20 U	0.20 U 0.20 U	0.20 UJ	0.20 U	0.20 U
25	RLSW03	Surface Water	DIN	Nickel	ug/l											6.01	4.28	3.03	4.3	4.42 4.25	5.70 5.52	3.17 3.10	5.26	4.88	3.17
25	RLSW03	Surface Water	DIN	Potassium	ug/l											2400									

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						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW03	Surface Water	DIN	Selenium	ug/l											0.5 U	1.53 U	2 U	0.79 UJ	1.0 U 1.0 U	1.2 U 0.5 J	1.2 U 1.2 U	1.5 U	0.7 J	0.5 J
25	RLSW03	Surface Water	DIN	Silver	ug/l											0.1 U	1 U	1 U	0.085 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U	0.035 U	0.030 U	0.030 U
25	RLSW03	Surface Water	DIN	Sodium	ug/l											12000									
25	RLSW03	Surface Water	DIN	Thallium	ug/l											0.05 U	1 U	1 U	0.044 U	0.026 0.021	0.052 U 0.052 U	0.024 U 0.024 U	0.053	0.041	0.030 U
25	RLSW03	Surface Water	DIN	Vanadium	ug/l											5 U									
25	RLSW03	Surface Water	DIN	Zinc	ug/l											25.1	11.6	13	14.1 J	18.5 17.4	25.4 32.7	13.2 12.9	21.6	20.7	12.25
25	RLSW03	Surface Water	TIN	Aluminum	ug/l					13100	11800	11400	6710	8590	2030	2540		1250	1270	1600 1410	3600 3700	1340 1520	2580	2460	1410
25	RLSW03	Surface Water	TIN	Antimony	ug/l					5 U	0.2 U	0.17 J	1.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.079 UJ	0.09 U 0.09 U	0.090 U 0.090 U	0.090 U 0.090 U	0.05 UJ	0.05 U	0.05 U
25	RLSW03	Surface Water	TIN	Arsenic	ug/l	1 U	1 U	1 U	1 U	2 U	2 U	0.2 U	2.9 U	5 U	1 U	1 U	1 U	1 U	0.10 J	0.73 0.63	0.67 0.66	0.2 J 0.1 J	0.50 U	0.14 J	0.20 J
25	RLSW03	Surface Water	TIN	Barium	ug/l	15.3 J	11.3 J	17.9 J	20 J	10.8 J	12	13 J	12.9 J	14.3	12.5	13.2									
25	RLSW03	Surface Water	TIN	Beryllium	ug/l					0.26 U	0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.043 0.039	0.090 0.078	0.037 0.036	0.076	0.057	0.031
25	RLSW03	Surface Water	TIN	Cadmium	ug/l	1 U	2 U	5 U	2 U	0.29 J	0.3	4.5	0.3 U	2 U	0.2 U	0.2 U	1 U	0.06 J	0.094 U	0.065 0.054	0.114 0.125	0.066 0.069	0.096	0.087	0.046
25	RLSW03	Surface Water	TIN	Calcium	ug/l	33400	32200	20200	16300	30400	28600	29600	20200	24900	17600										
25	RLSW03	Surface Water	TIN	Chromium	ug/l	4 U	6 U	6 U	9 U	4 UJ	5 U	2.5 J	0.4 U	6 U	0.1 U	0.208	0.77 J	1 U	1.00 U	0.20 U 0.22 J	0.20 U 0.20 U	0.03 J 0.03 J	0.20 U	0.09 J	0.20 U
25	RLSW03	Surface Water	TIN	Cobalt	ug/l					39.5	34	0.17 J	27 J	26.7	9.54	10.9									
25	RLSW03	Surface Water	TIN	Copper	ug/l	759	578	67.7	52.1	679	533	612	525	480	184	156	65.5	122	92.9	130 J 126 J	156 J 161 J	120 127	152	142	70.4 J
25	RLSW03	Surface Water	TIN	Iron	ug/l	5130	4180	2390	1850	5170	4580	4990	935	1000 U	74										
25	RLSW03	Surface Water	TIN	Lead	ug/l	1 U	1 U	1 U	1 U	2 U	1	0.12 J	1.6 U	2.07	0.359	0.612	1 U	0.337 J	0.34 J	0.357 0.303	2.180 2.120	0.785 0.906	1.430	1.100	0.460
25	RLSW03	Surface Water	TIN	Magnesium	ug/l	4510	4240 J	3230 J	2940 J	4050	4000	4240	3140 J	3470	2780										
25	RLSW03	Surface Water	TIN	Manganese	ug/l	276	289	191	153	251	246	270	148	188	105	116									
25	RLSW03	Surface Water	TIN	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0260 UJ	0.20 U 0.20 U	0.20 U 0.20 U	0.20 U 0.20 U	0.20 UJ	0.20 U	0.20 U
25	RLSW03	Surface Water	TIN	Nickel	ug/l					18.7 J	20 U	18.8 J	18.1 J	14.3	4.92	5.67	2.09	3.05	4.0	4.12 3.97	5.39 5.63	3.20 3.44	5.21	4.61	2.68 J
25	RLSW03	Surface Water	TIN	Potassium	ug/l	4530 J	4110 J	2460 J	2550 J	4090	2100	3890	3850 J	3470	2110										
25	RLSW03	Surface Water	TIN	Selenium	ug/l	5 U	5 U	10 U	1 U	3 U	5	0.59 J	1.1 J	5 U	0.5 U	0.5 U	0.88 J	2 U	0.80 UJ	1.0 U 1.0 U	1.2 U 1.2 U	1.2 U 1.2 U	1.5 U	0.7 J	0.9 J
25	RLSW03	Surface Water	TIN	Silver	ug/l	3 U	3 U	3 U	3 U	4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	0.35 U	1 U	1 U	0.085 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U	0.030 U	0.030 U
25	RLSW03	Surface Water	TIN	Sodium	ug/l	17200	16500	13300	11600	16000	16200	16600	11500		12100										
25	RLSW03	Surface Water	TIN	Thallium	ug/l					10 U	0.2 U	0.14 J	3.5 U	2 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.024 0.024	0.058 U 0.059 U	0.028 U 0.027 U	0.044	0.036	0.030 U
25	RLSW03	Surface Water	TIN	Vanadium	ug/l					3 U	10 U	0.4 J	0.3 J	20 U	1 U	1 U									
25	RLSW03	Surface Water	TIN	Zinc	ug/l	128	77	38.7	37.4	98.8	73	85	42.9	61.5	18.1	22.3	9.65	14.6	14.0 J	17.3 15.0	25.5 25.1	13.8 14.1	20.7	19.4	11.46
25	RLSW03	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	0.58 J	0.6	0.64 J	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.080 J	0.50 U
25	RLSW03	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.050 U
25	RLSW03	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U									
25	RLSW03	Surface Water	VOA	1,1-Dichloroethane	ug/l	0.52 J	0.63 J	0.43 J	1 U	1.2 J	1.2	1.7	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.11 J		0.18 J 0.17 J		0.31 J	0.11 J
25	RLSW03	Surface Water	VOA	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW03	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 UJ	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U		2.0 U 2.0 U		2.0 U	2.0 U
25	RLSW03	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U		1 UJ		1 U		2.5 U	10 U	10 U	5 U	5 U	1.0 U	2.0 U 2.0 U		2.0 U 2.0 U		2.0 U	2.0 U
25	RLSW03	Surface Water	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U		2.0 U 2.0 U		2.0 U	2.0 U
25	RLSW03	Surface Water	VOA	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	1,2-Dichloroethene	ug/l						2.3														
25	RLSW03	Surface Water	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	1,3-Dichloro-2-propanol	ug/l	50 U	100 U	100 U																	
25	RLSW03	Surface Water	VOA	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.24 J 0.23 J		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U														
25	RLSW03	Surface Water	VOA	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U	5 U																	
25	RLSW03	Surface Water	VOA	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 UJ		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	1,4-Dioxane	ug/l	250 U	250 U	250 U																	
25	RLSW03	Surface Water	VOA	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	2-Butanone	ug/l	5 U	5 U	5 U	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U	10 U	5.0 U	20 UR 20 UR				20 U	
25	RLSW03	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l	50 U	10 U	10 U						10 U	10 U	10 U									
25	RLSW03	Surface Water	VOA	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 UJ	20 U	5 U	5 U	10 U	20 U	20 U	10 U	10 U	5.0 UJ	20 UR 20 UR				20 U	
25	RLSW03	Surface Water	VOA	2-Nitropropane	ug/l	10 U	10 U	10 U																	
25	RLSW03	Surface Water	VOA	3-chloropropene	ug/l	5 U	5 U	5 U																	
25	RLSW03	Surface Water	VOA	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	5 U	5 UJ	20 U	5 U	5 U	10 U	20 U	20 U	5 U	5 U	5.0 U	20 UR 20 UR				20 U	
25	RLSW03	Surface Water	VOA	Acetone	ug/l	14	5 U	5 U	5 U		20 U	5 U	5 U		50 U	50 U	25 U	25 U	5.0 U	20 UR 20 UR		20 U 20 U		20 U	20 UJ
25	RLSW03	Surface Water	VOA	Acetonitrile	ug/l	5 U	5 U	5 U																	
25	RLSW03	Surface Water	VOA	Acrolein	ug/l	100 U	25 U	25 U																	
25	RLSW03	Surface Water	VOA	Acrylonitrile	ug/l	50 U	10 U	10 U							10 U	10 U									
25	RLSW03	Surface Water	VOA	Benzene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Benzyl chloride	ug/l	5 U	5 U	5 U																	
25	RLSW03	Surface Water	VOA	Bromoacetone	ug/l	2000 U	2000 U	2000 U																	
25	RLSW03	Surface Water	VOA	Bromobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	Bromochloromethane	ug/l					1 UJ		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW03	Surface Water	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ 0.50 UJ				0.50 U	
25	RLSW03	Surface Water	VOA	BTEX (total)	ug/l	0.66	1 U	1 U	1 U	1 U	0.5 U														
25	RLSW03	Surface Water	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U	10 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 UJ
25	RLSW03	Surface Water	VOA	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	0.9 J	1	1.2	1 U	1 U	5 U	5 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.16 J 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	Chloromethane	ug/l	1 U	1 U	14	1 U	0.57 J	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Chloroprene	ug/l	50 U	10 U	10 U																	
25	RLSW03	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l	0.93 J	0.56 J	1 U	1 U	2.8 J		1	0.6 J	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.11 J 0.12 J		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	5 U	5 U	5 U	5 U	1.0 UJ	0.50 UJ 0.50 UJ				0.50 U	
25	RLSW03	Surface Water	VOA	Diethyl ether	ug/l	1.9 J	10 U	10 U																	
25	RLSW03	Surface Water	VOA	Ethyl methacrylate	ug/l	5 U	5 U	5 U																	
25	RLSW03	Surface Water	VOA	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Ethylene oxide	ug/l	250 U	25 U	25 U																	
25	RLSW03	Surface Water	VOA	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U	4 U	1.0 UJ	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	Hexachloroethane	ug/l	10 U	10 U	10 U																	
25	RLSW03	Surface Water	VOA	Iodomethane	ug/l	5 U	5 U	5 U							5 U	5 U									
25	RLSW03	Surface Water	VOA	Isobutyl alcohol	ug/l	100 U	100 U	100 U																	
25	RLSW03	Surface Water	VOA	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	LPAH (total)	ug/l	1 U	1 U	1 U																	
25	RLSW03	Surface Water	VOA	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	2 U	2 U	2.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Malononitrile	ug/l	1000000 U																			
25	RLSW03	Surface Water	VOA	Methacrylonitrile	ug/l	5 U	5 U	5 U																	
25	RLSW03	Surface Water	VOA	Methyl methacrylate	ug/l	5 U	5 U	5 U																	
25	RLSW03	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	Methylene chloride	ug/l	1.4	1.2	1 U	1 U	1.6 UJ	1	1.5 J	1 U	5 U	5 U	1.3 U	5 U	2 U	1.0 U	2.0 U 2.0 U		2.0 U 2.0 U		2.0 U	2.0 U
25	RLSW03	Surface Water	VOA	Naphthalene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U	5 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	NCPAH (total)	ug/l	1 U	1 U	1 U																	
25	RLSW03	Surface Water	VOA	Nitrobenzene	ug/l	100 U	25 U	25 U																	
25	RLSW03	Surface Water	VOA	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Propargyl alcohol	ug/l	1000 U	1000 U	1000 U																	
25	RLSW03	Surface Water	VOA	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U	

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW03	Surface Water	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U	
25	RLSW03	Surface Water	VOA	Tetrachloroethene	ug/l	1 U	1 U	0.25 J	1 U	0.56 J	0.5	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Toluene	ug/l	0.66 J	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.14 J 0.17 J		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U	5 U							10 U	10 U									
25	RLSW03	Surface Water	VOA	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Trichlorofluoromethane	ug/l	5.6	1 U	1 U					1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U	
25	RLSW03	Surface Water	VOA	Vinyl acetate	ug/l	10 U	5 U	5 U							5 U	5 U									
25	RLSW03	Surface Water	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U	0.50 U
25	RLSW03	Surface Water	VOA	Xylenes	ug/l					1 UJ	0.5 U	1 U		2 U								1.0 U 1.0 U		1.0 U	1.0 U
25	RLSW03	Surface Water	VOA	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U											1.0 U 1.0 U		1.0 U	1.0 U
25	RLSW04	Surface Water	DIN	Aluminum	ug/l											28.2		22.4	32.0 U	21.4	6.6	15.4	6.3	4.5	15.4
25	RLSW04	Surface Water	DIN	Antimony	ug/l											0.568	1 UJ	0.211 J	0.22 UJ	0.30	0.135	0.225	0.15 U	0.12 U	0.17
25	RLSW04	Surface Water	DIN	Arsenic	ug/l											0.175	1 U	1 U	0.10 U	0.50 U	0.32 J	0.1 J	0.50 U	0.09 J	0.50 U
25	RLSW04	Surface Water	DIN	Barium	ug/l											6.85									
25	RLSW04	Surface Water	DIN	Beryllium	ug/l											0.15 U	1 U	1 U	0.043 U	0.020 U	0.020 U	0.020 U	0.030 U	0.030 U	0.030 U
25	RLSW04	Surface Water	DIN	Cadmium	ug/l											0.2 U	1 U	0.1 U	0.18	0.020 UJ	0.020 U	0.020 U	0.030 U	0.006 J	0.006 J
25	RLSW04	Surface Water	DIN	Calcium	ug/l											22000									
25	RLSW04	Surface Water	DIN	Chromium	ug/l											0.825	1 U	1 U	1.0 U	0.27 J	0.20 U	0.07 J	0.20 U	0.16 J	0.13 J
25	RLSW04	Surface Water	DIN	Cobalt	ug/l											7.85									
25	RLSW04	Surface Water	DIN	Copper	ug/l											4.07	2.32	2.15	1.9 J	2.27	1.73 J	1.92	2.13	1.61	2.06
25	RLSW04	Surface Water	DIN	Iron	ug/l											350									
25	RLSW04	Surface Water	DIN	Lead	ug/l											0.353	1 UJ	1 U	0.075 U	0.082	0.030 U	0.030 U	0.012 J	0.015 J	0.051
25	RLSW04	Surface Water	DIN	Magnesium	ug/l											3200									
25	RLSW04	Surface Water	DIN	Manganese	ug/l											47.6									
25	RLSW04	Surface Water	DIN	Mercury	ug/l											0.2 U	0.2 U	0.2 U	0.155 J	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
25	RLSW04	Surface Water	DIN	Nickel	ug/l											1.29	1.92 J	2 U	1.3 J	0.67	0.91	0.38	0.82	0.49	0.88
25	RLSW04	Surface Water	DIN	Potassium	ug/l											1700									
25	RLSW04	Surface Water	DIN	Selenium	ug/l											0.5 U	1 U	2 U	0.59 UJ	1.0 U	1.2 U	1.2 U	1.5 U	1.5 U	0.4 J
25	RLSW04	Surface Water	DIN	Silver	ug/l											0.1 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
25	RLSW04	Surface Water	DIN	Sodium	ug/l											9800									
25	RLSW04	Surface Water	DIN	Thallium	ug/l											0.05 U	1 UJ	1 U	0.044 U	0.020 U	0.020 U	0.020 U	0.030 U	0.030 U	0.030 U
25	RLSW04	Surface Water	DIN	Vanadium	ug/l											5 U									
25	RLSW04	Surface Water	DIN	Zinc	ug/l											4.55	2.11 J	5 U	2.7 J	2.47 J	1.71	1.2	1.40 J	1.36	2.49
25	RLSW04	Surface Water	TIN	Aluminum	ug/l					517	63	52.2 J	172 J	200 U	41.1	54.9		42.3	32.0 U	47.9	13.2	28.2	11.2	19.2	26.9
25	RLSW04	Surface Water	TIN	Antimony	ug/l					5 U	0.2 U	0.27 J	1.6 U	1 U	0.5 U	0.5 U	1 U	0.263 J	0.49 UJ	0.37	0.141	0.245	0.14 U	0.12 U	0.19
25	RLSW04	Surface Water	TIN	Arsenic	ug/l		1 U	1 U	1 U	2 U	2 U	0.45 J	2.9 U	5 U	1 U	1 U	1 U	1 U	0.10 U	0.50 U	0.28 J	0.1 J	0.50 U	0.16 J	0.17 J
25	RLSW04	Surface Water	TIN	Barium	ug/l		5.8 J	6 J	6.5 J	7	5 U	5.3 J	5.7 J	5.88	5.97	7									
25	RLSW04	Surface Water	TIN	Beryllium	ug/l					0.26 U	0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U	0.020 U	0.020 U	0.030 U	0.030 U	0.030 U
25	RLSW04	Surface Water	TIN	Cadmium	ug/l		2 U	5 U	2 U	0.057 UJ	0.2 U	0.084 J	0.3 U	2 U	0.2 U	0.2 U	1 U	0.1 U	0.094 U	0.020 UJ	0.020 U	0.020 U	0.030 U	0.005 J	0.030 U
25	RLSW04	Surface Water	TIN	Calcium	ug/l		19600	21000	18300	12300	13700	12600	8900	21300	16200										
25	RLSW04	Surface Water	TIN	Chromium	ug/l		6 U	6 U	9 U	4 UJ	5 U	0.6 U	0.4 U	6 U	0.1 U	0.277	1 U	1 U	1.0 U	0.32 J	0.20 U	0.11 J	0.20 U	0.20	0.20 U
25	RLSW04	Surface Water	TIN	Cobalt	ug/l					4 U	10 U	0.5 J	0.5 U	0.8 U	0.152	0.327									
25	RLSW04	Surface Water	TIN	Copper	ug/l		4 U	3 U	3 U	5.1 J	2 U	2.5 J	13.1 J	6 U	2.75	3.26 J	2.88	2.71	2.6	2.62	2.06 J	2.39	2.45	2.08	1.98 J
25	RLSW04	Surface Water	TIN	Iron	ug/l		337	42.1 J	123	485	132	164	191	1000 U	122										
25	RLSW04	Surface Water	TIN	Lead	ug/l		1 U	1 U	1 U	2 U	0.2 U	1 J	1.6 J	2 U	0.299	0.425	1 U	0.224 J	0.12 J	0.201	0.049 U	0.126	0.030 U	0.059	0.099
25	RLSW04	Surface Water	TIN	Magnesium	ug/l		2500 J	2970 J	2580 J	2610	2250	2180	1990 J	2980	2340										
25	RLSW04	Surface Water	TIN	Manganese	ug/l		60.3	20.6	20.8	46.3	26	41.2	20.8	30	24	36.8									
25	RLSW04	Surface Water	TIN	Mercury	ug/l		0.2 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
25	RLSW04	Surface Water	TIN	Nickel	ug/l					4 U	20 U	1.1 U	0.7 U	2 U	0.694	0.954	2 U	2 U	1.1 J	0.75	0.92	0.43	0.79	0.43	0.76 J

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Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW04	Surface Water	TIN	Potassium	ug/l		602 J	1010 J	1460 J	936	2000 U	790	819 J	1100	1040										
25	RLSW04	Surface Water	TIN	Selenium	ug/l		1 U	1 U	1 U	0.48 U	2 U	1.2 J	1.1 U	5 U	0.5 U	0.5 U	1 U	2 U	0.38 UJ	1.0 U	1.2 U	1.2 U	1.5 U	0.3 J	0.3 J
25	RLSW04	Surface Water	TIN	Silver	ug/l		3 U	3 U	3 U	4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	0.35 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
25	RLSW04	Surface Water	TIN	Sodium	ug/l		8190	8580	8260	10400	8660	7780	6560		7930										
25	RLSW04	Surface Water	TIN	Thallium	ug/l					10 U	0.2 U	0.16 J	3.5 U	2 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U	0.020 U	0.020 U	0.030 U	0.030 U	0.030 U
25	RLSW04	Surface Water	TIN	Vanadium	ug/l					3 U	10 U	0.4 J	0.4 J	20 U	1 U	1 U									
25	RLSW04	Surface Water	TIN	Zinc	ug/l		9.5 J	11 J	11 J	34.3 U	10 U	3.3 J	19.8 J	25 U	2.56	3.11	2.61 J	5 U	5.0 U	2.61	2.14	1.8	1.96 J	1.59	1.68
25	RLSW04	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l		1 U	1 U						1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	1,1,1-Trichloroethane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.050 U
25	RLSW04	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	1,1,2-Trichloroethane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.050 U
25	RLSW04	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U									
25	RLSW04	Surface Water	VOA	1,1-Dichloroethane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	1,1-Dichloroethene	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	1,2,3-Trichloropropane	ug/l		1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l		1 U	1 U				1 U		2 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	RLSW04	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l		1 U	1 U		1 U		1 U		2.5 U	10 U	10 U	5 U	5 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 UJ
25	RLSW04	Surface Water	VOA	1,2-Dibromoethane	ug/l		1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	RLSW04	Surface Water	VOA	1,2-Dichlorobenzene	ug/l		1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	1,2-Dichloroethane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	1,2-Dichloroethene	ug/l						0.5 U														
25	RLSW04	Surface Water	VOA	1,2-Dichloropropane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	1,3-Dichloro-2-propanol	ug/l		100 U	100 U																	
25	RLSW04	Surface Water	VOA	1,3-Dichlorobenzene	ug/l		1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	1,3-Dichloropropene	ug/l		1 U	1 U	1 U	1 U	0.5 U														
25	RLSW04	Surface Water	VOA	1,4-Dichloro-2-butene(cis)	ug/l		5 U	5 U																	
25	RLSW04	Surface Water	VOA	1,4-Dichlorobenzene	ug/l		1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	1,4-Dioxane	ug/l		250 U	250 U																	
25	RLSW04	Surface Water	VOA	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	2-Butanone	ug/l		5 U	5 U	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U	10 U	5.0 U	20 UR				20 U	
25	RLSW04	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l		10 U	10 U						10 U	10 U	10 U									
25	RLSW04	Surface Water	VOA	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	2-Hexanone	ug/l		5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	10 U	10 U	5.0 U	20 UR				20 U	
25	RLSW04	Surface Water	VOA	2-Nitropropane	ug/l		10 U	10 U																	
25	RLSW04	Surface Water	VOA	3-chloropropene	ug/l		5 U	5 U																	
25	RLSW04	Surface Water	VOA	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	4-Methyl-2-pentanone	ug/l		5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	5 U	5 U	5.0 U	20 UR				20 U	
25	RLSW04	Surface Water	VOA	Acetone	ug/l		5 U	5 U	5 U		20 U	5 U	5 U		3.6 J	50 U	25 U	25 U	5.0 U	20 UR		20 U		20 U	20 UJ
25	RLSW04	Surface Water	VOA	Acetonitrile	ug/l		5 U	5 U																	
25	RLSW04	Surface Water	VOA	Acrolein	ug/l		25 U	25 U																	
25	RLSW04	Surface Water	VOA	Acrylonitrile	ug/l		10 U	10 U							10 U	10 U									
25	RLSW04	Surface Water	VOA	Benzene	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	Benzyl chloride	ug/l		5 U	5 U																	
25	RLSW04	Surface Water	VOA	Bromoacetone	ug/l		2000 U	2000 U																	
25	RLSW04	Surface Water	VOA	Bromobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	Bromochloromethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	Bromodichloromethane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	Bromoform	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	Bromomethane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ				0.50 U	
25	RLSW04	Surface Water	VOA	BTEX (total)	ug/l		1 U	1 U	1 U	1 U	0.5 U														
25	RLSW04	Surface Water	VOA	Carbon disulfide	ug/l		1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U	10 UJ	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	Carbon tetrachloride	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 UJ
25	RLSW04	Surface Water	VOA	Chlorobenzene	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	Chloroethane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	Chloroform	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	Chloromethane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1.0 UJ	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	Chloroprene	ug/l		10 U	10 U																	

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Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW04	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	Dibromochloromethane	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	Dibromomethane	ug/l		1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	Dichlorodifluoromethane	ug/l		1 U	1 U					1 U	1 U	5 U	5 U	5 U	5 U	1.0 UJ	0.50 UJ				0.50 U	
25	RLSW04	Surface Water	VOA	Diethyl ether	ug/l		10 U	10 U																	
25	RLSW04	Surface Water	VOA	Ethyl methacrylate	ug/l		5 U	5 U																	
25	RLSW04	Surface Water	VOA	Ethylbenzene	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.050 U
25	RLSW04	Surface Water	VOA	Ethylene oxide	ug/l		25 U	25 U																	
25	RLSW04	Surface Water	VOA	Hexachlorobutadiene	ug/l		1 U	1 U						2 U	2 U	2 U	4 U	4 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	Hexachloroethane	ug/l		10 U	10 U																	
25	RLSW04	Surface Water	VOA	Iodomethane	ug/l		5 U	5 U							5 U	5 U									
25	RLSW04	Surface Water	VOA	Isobutyl alcohol	ug/l		100 U	100 U																	
25	RLSW04	Surface Water	VOA	Isopropylbenzene	ug/l		1 U	1 U						1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	LPAH (total)	ug/l		1 U	1 U																	
25	RLSW04	Surface Water	VOA	m,p-Xylene	ug/l		1 U	1 U	1 U				1 U		2 U	2 U	2 U	2 U	2.0 U	0.50 U		0.50 U		0.50 U	0.050 U
25	RLSW04	Surface Water	VOA	Methacrylonitrile	ug/l		5 U	5 U																	
25	RLSW04	Surface Water	VOA	Methyl methacrylate	ug/l		5 U	5 U																	
25	RLSW04	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	Methylene chloride	ug/l		1 U	1 U	1 U	2 U	1 U	2 U	1 U	5 U	5 U	1.7 U	5 U	2 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	RLSW04	Surface Water	VOA	Naphthalene	ug/l		1 U	1 U						2 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U	5 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	NCPAH (total)	ug/l		1 U	1 U																	
25	RLSW04	Surface Water	VOA	Nitrobenzene	ug/l		25 U	25 U																	
25	RLSW04	Surface Water	VOA	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	o-Xylene	ug/l		1 U	1 U	1 U				1 U		2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.050 U
25	RLSW04	Surface Water	VOA	Propargyl alcohol	ug/l		1000 U	1000 U																	
25	RLSW04	Surface Water	VOA	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	Styrene	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 UJ	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW04	Surface Water	VOA	Tetrachloroethene	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	Toluene	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.11 J		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l		1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l		5 U	5 U							10 U	10 U									
25	RLSW04	Surface Water	VOA	Trichloroethene	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	Trichlorofluoromethane	ug/l		1 U	1 U					1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW04	Surface Water	VOA	Vinyl acetate	ug/l		5 U	5 U							5 U	5 U									
25	RLSW04	Surface Water	VOA	Vinyl chloride	ug/l		1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW04	Surface Water	VOA	Xylenes	ug/l					1 U	0.5 U	1 U		2 U								1.0 U			1.0 U
25	RLSW04	Surface Water	VOA	Xylenes (total)	ug/l		1 U	1 U	1 U	1 U	0.5 U											1.0 U			1.0 U
25	RLSW05	Surface Water	DIN	Aluminum	ug/l											25.4		31.8	32.0 U	45.8	11.6	20.5	10.6	10.8	10.4
25	RLSW05	Surface Water	DIN	Antimony	ug/l											0.367	1 UJ	1 U	0.12 UJ	0.17	0.131	0.150	0.11 U	0.13 U	0.15
25	RLSW05	Surface Water	DIN	Arsenic	ug/l											0.201	1 UJ	1 U	0.10 U	0.50 U	0.47 J	0.1 J	0.50 U	0.15 J	0.09 J
25	RLSW05	Surface Water	DIN	Barium	ug/l											13.9									
25	RLSW05	Surface Water	DIN	Beryllium	ug/l											0.15 U	1 U	1 U	0.043 U	0.020 U	0.020 U	0.020 U	0.030 U	0.030 U	0.030 U
25	RLSW05	Surface Water	DIN	Cadmium	ug/l											0.2 U	1 U	0.1 U	0.30	0.025 J	0.035	0.027 U	0.025 J	0.034	0.021 J
25	RLSW05	Surface Water	DIN	Calcium	ug/l											13000									
25	RLSW05	Surface Water	DIN	Chromium	ug/l											0.471	1 U	1 U	1.0 U	0.27 J	0.20 U	0.04 J	0.20 U	0.14 J	0.09 J
25	RLSW05	Surface Water	DIN	Cobalt	ug/l											8.5									
25	RLSW05	Surface Water	DIN	Copper	ug/l											32	33.4	28.8	20.8	33.2	28.6 J	40.1	27.0	49.5	25.4
25	RLSW05	Surface Water	DIN	Iron	ug/l											390									
25	RLSW05	Surface Water	DIN	Lead	ug/l											0.1 U	1 U	1 U	0.075 U	0.030 U	0.030 U	0.030 U	0.034	0.028 J	0.007 J
25	RLSW05	Surface Water	DIN	Magnesium	ug/l											2600									
25	RLSW05	Surface Water	DIN	Manganese	ug/l											175									
25	RLSW05	Surface Water	DIN	Mercury	ug/l											0.2 U	0.2 U	0.2 U	0.0372 J	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
25	RLSW05	Surface Water	DIN	Nickel	ug/l											1.97	1.83 J	1.01 J	1.8 J	1.29	1.52	1.30	1.68	1.63	1.64
25	RLSW05	Surface Water	DIN	Potassium	ug/l											1600									
25	RLSW05	Surface Water	DIN	Selenium	ug/l											0.5 U	1.24 U	2 U	0.60 UJ	1.0 U	1.2 U	1.2 U	1.5 U	0.8 J	0.3 J
25	RLSW05	Surface Water	DIN	Silver	ug/l											0.1 U	1 U	1 U	0.085 U	0.020 J	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
25	RLSW05	Surface Water	DIN	Sodium	ug/l											12000									
25	RLSW05	Surface Water	DIN	Thallium	ug/l											0.05 U	1 U	1 U	0.044 U	0.020 U	0.020 U	0.020 U	0.030 U	0.030 U	0.030 U
25	RLSW05	Surface Water	DIN	Vanadium	ug/l											5 U									

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW05	Surface Water	DIN	Zinc	ug/l											10.2	4.29 J	5 U	6.5	5.86	4.90	4.4	5.46 J	5.86	4.50
25	RLSW05	Surface Water	TIN	Aluminum	ug/l					615	78	465	134 J	325	51.9	41.7		30.2	32.0 U	55.2	23.8	30.7	16.1	15.2	12.9
25	RLSW05	Surface Water	TIN	Antimony	ug/l					5 U	0.2 U	1.3 J	1.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.079 UJ	0.18	0.082 J	0.140	0.11 U	0.13 U	0.16
25	RLSW05	Surface Water	TIN	Arsenic	ug/l	1.2 J	1 U	1 U	1 U	2 U	2 U	1.7 J	2.9 U	5 U	1 U	1 U	1 U	1 U	0.10 U	0.52	0.52	0.2 J	0.50 U	0.15 J	0.15 J
25	RLSW05	Surface Water	TIN	Barium	ug/l	7.9 J	5 J	10.5 J	5.4 J	8.9	5 U	5.4 J	5.9 J	9.64	13.4	12.9									
25	RLSW05	Surface Water	TIN	Beryllium	ug/l					0.26 U	0.2 U	8.6	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U	0.020 U	0.020 U	0.030 U	0.006 J	0.030 U
25	RLSW05	Surface Water	TIN	Cadmium	ug/l	1 U	2 U	5 U	2 U	0.057 UJ	0.3	1.4 J	0.3 U	2 U	0.2 U	0.2 U	1 U	0.1 U	0.094 U	0.021 J	0.030 U	0.026 U	0.029 J	0.032	0.030 U
25	RLSW05	Surface Water	TIN	Calcium	ug/l	13100	19100	7920	17300	11400	12800	12600	8920	13600	13600										
25	RLSW05	Surface Water	TIN	Chromium	ug/l	4 J	6 U	8.6 J	10.3	4 UJ	5 U	1.3 J	0.4 U	6 U	0.1 U	0.154	0.85 J	1 U	1.0 U	0.27 J	0.20 U	0.04 J	0.20 U	0.12 J	0.20 U
25	RLSW05	Surface Water	TIN	Cobalt	ug/l					5.3	10 U	0.12 J	0.5 U	1.14	2.26	2.45									
25	RLSW05	Surface Water	TIN	Copper	ug/l	4.8 J	4 U	5.1 J	4.1 J	4.3 J	2 U	2 J	1.8 J	23.8	49.5	32	37.4	32.5	23.5	31.9	41.1 J	44.8	40.2	54.1	25.2 J
25	RLSW05	Surface Water	TIN	Iron	ug/l	228	103	396	36.3 J	510	120	366	159	1000 U	99.2										
25	RLSW05	Surface Water	TIN	Lead	ug/l	1 U	1 U	1 U	1 U	2 U	0.2 U	0.052 J	2 J	2 U	0.15 U	0.15 U	1 U	1 U	0.075 U	0.034	0.030 U	0.030 U	0.014 J	0.012 J	0.006 J
25	RLSW05	Surface Water	TIN	Magnesium	ug/l	2450	2460 J	1920 J	2520 J	2610	2250	4080	2110 J	2680	2670										
25	RLSW05	Surface Water	TIN	Manganese	ug/l	27.9	34.9	26.4	8.1 J	35.6	23	43.8	22.1	67.1	80.6	137									
25	RLSW05	Surface Water	TIN	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
25	RLSW05	Surface Water	TIN	Nickel	ug/l					4 U	20 U	1.5 J	0.7 U	2 U	1.63	1.56	0.94 J	0.993 J	1.6 J	1.19	1.31	1.25	1.60	1.56	1.32 J
25	RLSW05	Surface Water	TIN	Potassium	ug/l	733 J	600 J	1170 J	1440 J	810	2000 U	2320	827 J	1150	1310										
25	RLSW05	Surface Water	TIN	Selenium	ug/l	1 U	1 U	1 U	1 U	0.48 U	2 U	4.5	1.1 U	5 U	0.5 U	0.5 U	1 U	2 U	0.67 UJ	1.0 U	1.2 U	1.2 U	1.5 U	0.8 J	0.7 J
25	RLSW05	Surface Water	TIN	Silver	ug/l	3 U	3 U	3 U	3 U	4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	0.35 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
25	RLSW05	Surface Water	TIN	Sodium	ug/l	9010	8040	5530	8190	9730	8470	15500	6830		12400										
25	RLSW05	Surface Water	TIN	Thallium	ug/l					10 U	0.2 U	0.19 J	3.5 U	2 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U	0.023 U	0.020 U	0.030 U	0.030 U	0.030 U
25	RLSW05	Surface Water	TIN	Vanadium	ug/l					3 U	10 U	0.4 J	0.3 J	20 U	1 U	1 U									
25	RLSW05	Surface Water	TIN	Zinc	ug/l	40.4	4.1 J	10.2 J	6.1 J	30.8 U	10 U	3.9 J	5.1 U	25 U	5.63	5.99	4.25 J	7.76 J	6.4 J	5.35	4.61	4.3	4.48 J	5.57	4.30
25	RLSW05	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U									
25	RLSW05	Surface Water	VOA	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	RLSW05	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U		1 U		1 U		2.5 U	10 U	10 U	5 U	5 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 UJ
25	RLSW05	Surface Water	VOA	1,2-Dibromoethane	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	RLSW05	Surface Water	VOA	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	1,2-Dichloroethene	ug/l						0.5 U														
25	RLSW05	Surface Water	VOA	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	1,3-Dichloro-2-propanol	ug/l	50 U	100 U	100 U																	
25	RLSW05	Surface Water	VOA	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U														
25	RLSW05	Surface Water	VOA	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U	5 U																	
25	RLSW05	Surface Water	VOA	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	1,4-Dioxane	ug/l	250 U	250 U	250 U																	
25	RLSW05	Surface Water	VOA	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	2-Butanone	ug/l	19	5 U	5 U	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U	10 U	5.0 U	20 UR				20 U	
25	RLSW05	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l	37 J	10 U	10 U						10 U	10 U	10 U									
25	RLSW05	Surface Water	VOA	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	10 U	10 U	5.0 U	20 UR				20 U	
25	RLSW05	Surface Water	VOA	2-Nitropropane	ug/l	10 U	10 U	10 U																	
25	RLSW05	Surface Water	VOA	3-chloropropene	ug/l	5 U	5 U	5 U																	
25	RLSW05	Surface Water	VOA	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	4-Methyl-2-pentanone	ug/l	22	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	5 U	5 U	5.0 U	20 UR				20 U	
25	RLSW05	Surface Water	VOA	Acetone	ug/l	100	5 U	5 U	5 U		20 U	5 U	5 U		50 U	50 U	25 U	25 U	1.4 J	20 UR		20 U		20 U	20 UJ
25	RLSW05	Surface Water	VOA	Acetonitrile	ug/l	5 U	5 U	5 U																	
25	RLSW05	Surface Water	VOA	Acrolein	ug/l	100 U	25 U	25 U																	

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	RLSW05	Surface Water	VOA	Acrylonitrile	ug/l	50 U	10 U	10 U							10 U	10 U									
25	RLSW05	Surface Water	VOA	Benzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Benzyl chloride	ug/l	5 U	5 U	5 U																	
25	RLSW05	Surface Water	VOA	Bromoacetone	ug/l	2000 U	2000 U	2000 U																	
25	RLSW05	Surface Water	VOA	Bromobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	Bromochloromethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ				0.50 U	
25	RLSW05	Surface Water	VOA	BTEX (total)	ug/l	0.54	1 U	1 U	1 U	1 U	0.5 U														
25	RLSW05	Surface Water	VOA	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	1.3 J	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U	10 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 UJ
25	RLSW05	Surface Water	VOA	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	Chloromethane	ug/l	13	1 U	11	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Chloroprene	ug/l	50 U	10 U	10 U																	
25	RLSW05	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ				0.50 U	
25	RLSW05	Surface Water	VOA	Diethyl ether	ug/l	10 U	10 U	10 U																	
25	RLSW05	Surface Water	VOA	Ethyl methacrylate	ug/l	5 U	5 U	5 U																	
25	RLSW05	Surface Water	VOA	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Ethylene oxide	ug/l	250 U	25 U	25 U																	
25	RLSW05	Surface Water	VOA	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U	4 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	Hexachloroethane	ug/l	10 U	10 U	10 U																	
25	RLSW05	Surface Water	VOA	Iodomethane	ug/l	5 U	5 U	5 U							5 U	5 U									
25	RLSW05	Surface Water	VOA	Isobutyl alcohol	ug/l	59 J	100 U	100 U																	
25	RLSW05	Surface Water	VOA	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	LPAH (total)	ug/l	1 U	1 U	1 U																	
25	RLSW05	Surface Water	VOA	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	2 U	2 U	2.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Malononitrile	ug/l	1000000 U																			
25	RLSW05	Surface Water	VOA	Methacrylonitrile	ug/l	5 U	5 U	5 U																	
25	RLSW05	Surface Water	VOA	Methyl methacrylate	ug/l	5 U	5 U	5 U																	
25	RLSW05	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	Methylene chloride	ug/l	1 U	1 U	1 U	1 U	2 U	1 U	2 U	1 U	5 U	5 U	1.4 U	5 U	2 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	RLSW05	Surface Water	VOA	Naphthalene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U	5 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	NCPAH (total)	ug/l	1 U	1 U	1 U																	
25	RLSW05	Surface Water	VOA	Nitrobenzene	ug/l	100 U	25 U	25 U																	
25	RLSW05	Surface Water	VOA	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Propargyl alcohol	ug/l	1000 U	1000 U	1000 U																	
25	RLSW05	Surface Water	VOA	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	RLSW05	Surface Water	VOA	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Toluene	ug/l	0.54 J	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U	5 U							10 U	10 U									
25	RLSW05	Surface Water	VOA	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Trichlorofluoromethane	ug/l	6	1 U	1 U					1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	RLSW05	Surface Water	VOA	Vinyl acetate	ug/l	10 U	5 U	5 U							5 U	5 U									
25	RLSW05	Surface Water	VOA	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	RLSW05	Surface Water	VOA	Xylenes	ug/l					1 U	0.5 U	1 U		2 U								1.0 U		1.0 U	1.0 U
25	RLSW05	Surface Water	VOA	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U											1.0 U		1.0 U	1.0 U
25	RLSW06	Surface Water	TIN	Aluminum	ug/l																	136			
25	RLSW06	Surface Water	TIN	Copper	ug/l																	112			
25	NL-11	Surface Water	DIN	Aluminum	ug/l																			2.1	2.8 U
25	NL-11	Surface Water	DIN	Antimony	ug/l																			0.09 U	0.05 U

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	NL-11	Surface Water	DIN	Arsenic	ug/l																			0.12 J	0.13 J
25	NL-11	Surface Water	DIN	Beryllium	ug/l																			0.030 U	0.030 U
25	NL-11	Surface Water	DIN	Cadmium	ug/l																			0.049	0.046
25	NL-11	Surface Water	DIN	Chromium	ug/l																			0.20 U	0.06 J
25	NL-11	Surface Water	DIN	Copper	ug/l																			22.7	24.7
25	NL-11	Surface Water	DIN	Lead	ug/l																			0.010 J	0.007 J
25	NL-11	Surface Water	DIN	Mercury	ug/l																			0.20 U	0.20 U
25	NL-11	Surface Water	DIN	Nickel	ug/l																			1.88	2.44
25	NL-11	Surface Water	DIN	Selenium	ug/l																			0.4 J	1.5 U
25	NL-11	Surface Water	DIN	Silver	ug/l																			0.006 J	0.030 U
25	NL-11	Surface Water	DIN	Thallium	ug/l																			0.030 U	0.030 U
25	NL-11	Surface Water	DIN	Zinc	ug/l																			10.4	11.46
25	NL-11	Surface Water	TIN	Aluminum	ug/l																		6.9	16.3	21.3
25	NL-11	Surface Water	TIN	Antimony	ug/l																			0.09 U	0.07
25	NL-11	Surface Water	TIN	Arsenic	ug/l																			0.18 J	0.17 J
25	NL-11	Surface Water	TIN	Beryllium	ug/l																			0.030 U	0.030 U
25	NL-11	Surface Water	TIN	Cadmium	ug/l																			0.050	0.042
25	NL-11	Surface Water	TIN	Chromium	ug/l																			0.13 J	0.20 U
25	NL-11	Surface Water	TIN	Copper	ug/l																		32.4	48.5	31.4 J
25	NL-11	Surface Water	TIN	Lead	ug/l																			0.014 J	0.007 J
25	NL-11	Surface Water	TIN	Mercury	ug/l																			0.20 U	0.20 U
25	NL-11	Surface Water	TIN	Nickel	ug/l																			1.90	1.86 J
25	NL-11	Surface Water	TIN	Selenium	ug/l																			0.6 J	0.6 J
25	NL-11	Surface Water	TIN	Silver	ug/l																			0.030 U	0.030 U
25	NL-11	Surface Water	TIN	Thallium	ug/l																			0.030 U	0.030 U
25	NL-11	Surface Water	TIN	Zinc	ug/l																			10.6	10.02
25	NL-12	Surface Water	DIN	Aluminum	ug/l																			1.5 J	8.1
25	NL-12	Surface Water	DIN	Antimony	ug/l																			0.06 U	0.10 U
25	NL-12	Surface Water	DIN	Arsenic	ug/l																			0.16 J	0.11 J
25	NL-12	Surface Water	DIN	Beryllium	ug/l																			0.030 U	0.030 U
25	NL-12	Surface Water	DIN	Cadmium	ug/l																			0.009 J	0.030 U
25	NL-12	Surface Water	DIN	Chromium	ug/l																			0.14 J	0.11 J
25	NL-12	Surface Water	DIN	Copper	ug/l																			3.23	2.02
25	NL-12	Surface Water	DIN	Lead	ug/l																			0.022 J	0.028 J
25	NL-12	Surface Water	DIN	Mercury	ug/l																			0.20 U	0.20 U
25	NL-12	Surface Water	DIN	Nickel	ug/l																			0.62	1.02
25	NL-12	Surface Water	DIN	Selenium	ug/l																			0.5 J	1.5 U
25	NL-12	Surface Water	DIN	Silver	ug/l																			0.030 U	0.030 U
25	NL-12	Surface Water	DIN	Thallium	ug/l																			0.030 U	0.030 U
25	NL-12	Surface Water	DIN	Zinc	ug/l																			1.96	3.00
25	NL-12	Surface Water	TIN	Aluminum	ug/l																		9.2	43.1	38.0
25	NL-12	Surface Water	TIN	Antimony	ug/l																			0.06 U	0.12
25	NL-12	Surface Water	TIN	Arsenic	ug/l																			0.18 J	0.16 J
25	NL-12	Surface Water	TIN	Beryllium	ug/l																			0.030 U	0.030 U
25	NL-12	Surface Water	TIN	Cadmium	ug/l																			0.011 J	0.030 U
25	NL-12	Surface Water	TIN	Chromium	ug/l																			0.10 J	0.20 U
25	NL-12	Surface Water	TIN	Copper	ug/l																		2.53	7.69	1.90 J
25	NL-12	Surface Water	TIN	Lead	ug/l																			0.080	0.073
25	NL-12	Surface Water	TIN	Mercury	ug/l																			0.20 U	0.20 U
25	NL-12	Surface Water	TIN	Nickel	ug/l																			0.64	0.63 J
25	NL-12	Surface Water	TIN	Selenium	ug/l																			0.4 J	0.4 J
25	NL-12	Surface Water	TIN	Silver	ug/l																			0.030 U	0.030 U
25	NL-12	Surface Water	TIN	Thallium	ug/l																			0.030 U	0.030 U
25	NL-12	Surface Water	TIN	Zinc	ug/l																			2.32	3.95
25	NL-13	Surface Water	DIN	Aluminum	ug/l																		2.1		
25	NL-13	Surface Water	DIN	Antimony	ug/l																		0.10 U		
25	NL-13	Surface Water	DIN	Arsenic	ug/l																		0.50 U		
25	NL-13	Surface Water	DIN	Beryllium	ug/l																		0.030 U		
25	NL-13	Surface Water	DIN	Cadmium	ug/l																		0.050		
25	NL-13	Surface Water	DIN	Chromium	ug/l																		0.20 U		
25	NL-13	Surface Water	DIN	Copper	ug/l																		3.80		
25	NL-13	Surface Water	DIN	Lead	ug/l																		0.014 J		
25	NL-13	Surface Water	DIN	Mercury	ug/l																		0.20 UJ		

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SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	NL-13	Surface Water	DIN	Nickel	ug/l																		1.27		
25	NL-13	Surface Water	DIN	Selenium	ug/l																		1.5 U		
25	NL-13	Surface Water	DIN	Silver	ug/l																		0.030 U		
25	NL-13	Surface Water	DIN	Thallium	ug/l																		0.030 U		
25	NL-13	Surface Water	DIN	Zinc	ug/l																		10.1 J		
25	NL-13	Surface Water	TIN	Aluminum	ug/l																		3.5		
25	NL-13	Surface Water	TIN	Antimony	ug/l																		0.10 U		
25	NL-13	Surface Water	TIN	Arsenic	ug/l																		0.50 U		
25	NL-13	Surface Water	TIN	Beryllium	ug/l																		0.030 U		
25	NL-13	Surface Water	TIN	Cadmium	ug/l																		0.045		
25	NL-13	Surface Water	TIN	Chromium	ug/l																		0.20 U		
25	NL-13	Surface Water	TIN	Copper	ug/l																		7.84		
25	NL-13	Surface Water	TIN	Lead	ug/l																		0.010 J		
25	NL-13	Surface Water	TIN	Mercury	ug/l																		0.20 U		
25	NL-13	Surface Water	TIN	Nickel	ug/l																		1.29		
25	NL-13	Surface Water	TIN	Selenium	ug/l																		1.5 U		
25	NL-13	Surface Water	TIN	Silver	ug/l																		0.030 U		
25	NL-13	Surface Water	TIN	Thallium	ug/l																		0.030 U		
25	NL-13	Surface Water	TIN	Zinc	ug/l																		9.87 J		
25	NL-14	Surface Water	DIN	Aluminum	ug/l																			6.7	2.4 U
25	NL-14	Surface Water	DIN	Antimony	ug/l																			0.05 U	0.05 U
25	NL-14	Surface Water	DIN	Arsenic	ug/l																			0.45 J	0.39 J
25	NL-14	Surface Water	DIN	Beryllium	ug/l																			0.030 U	0.030 U
25	NL-14	Surface Water	DIN	Cadmium	ug/l																			0.061	0.063
25	NL-14	Surface Water	DIN	Chromium	ug/l																			0.11 J	0.20 J
25	NL-14	Surface Water	DIN	Copper	ug/l																			5.07	2.21
25	NL-14	Surface Water	DIN	Lead	ug/l																			0.015 J	0.013 J
25	NL-14	Surface Water	DIN	Mercury	ug/l																			0.20 U	0.20 U
25	NL-14	Surface Water	DIN	Nickel	ug/l																			1.22	2.38
25	NL-14	Surface Water	DIN	Selenium	ug/l																			1.2 J	1.2 J
25	NL-14	Surface Water	DIN	Silver	ug/l																			0.030 U	0.030 U
25	NL-14	Surface Water	DIN	Thallium	ug/l																			0.030 U	0.030 U
25	NL-14	Surface Water	DIN	Zinc	ug/l																			12.6	30.19
25	NL-14	Surface Water	TIN	Aluminum	ug/l																			32.0	180
25	NL-14	Surface Water	TIN	Antimony	ug/l																			0.05 U	0.05 U
25	NL-14	Surface Water	TIN	Arsenic	ug/l																			0.46 J	0.62
25	NL-14	Surface Water	TIN	Beryllium	ug/l																			0.030 U	0.030 U
25	NL-14	Surface Water	TIN	Cadmium	ug/l																			0.064	0.140
25	NL-14	Surface Water	TIN	Chromium	ug/l																			0.20 U	0.20 U
25	NL-14	Surface Water	TIN	Copper	ug/l																			12.2	17.5 J
25	NL-14	Surface Water	TIN	Lead	ug/l																			0.012 J	0.272
25	NL-14	Surface Water	TIN	Mercury	ug/l																			0.20 U	0.20 U
25	NL-14	Surface Water	TIN	Nickel	ug/l																			1.14	2.48 J
25	NL-14	Surface Water	TIN	Selenium	ug/l																			1.2 J	1.4 J
25	NL-14	Surface Water	TIN	Silver	ug/l																			0.030 U	0.030 U
25	NL-14	Surface Water	TIN	Thallium	ug/l																			0.030 U	0.030 U
25	NL-14	Surface Water	TIN	Zinc	ug/l																			13.6	41.9
25	NL-14	Surface Water	VOA	1,1,1,2-Tetrachloroethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,1,1-Trichloroethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,1,2,2-Tetrachloroethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,1,2-Trichloroethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,1,2-Trichlorotrifluoroethane	ug/l																				
25	NL-14	Surface Water	VOA	1,1-Dichloroethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,1-Dichloroethene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,1-Dichloropropene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,2,3-Trichlorobenzene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	1,2,3-Trichloropropane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,2,4-Trichlorobenzene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	1,2,4-Trimethylbenzene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	1,2-Dibromo-3-chloropropane	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	1,2-Dibromoethane	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	1,2-Dichlorobenzene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,2-Dichloroethane	ug/l																			0.50 U	

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	NL-14	Surface Water	VOA	1,2-Dichloroethene	ug/l																				
25	NL-14	Surface Water	VOA	1,2-Dichloropropane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,3,5-Trimethylbenzene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	1,3-Dichloro-2-propanol	ug/l																				
25	NL-14	Surface Water	VOA	1,3-Dichlorobenzene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,3-Dichloropropane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,3-Dichloropropene	ug/l																				
25	NL-14	Surface Water	VOA	1,4-Dichloro-2-butene(cis)	ug/l																				
25	NL-14	Surface Water	VOA	1,4-Dichlorobenzene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	1,4-Dioxane	ug/l																				
25	NL-14	Surface Water	VOA	2,2-Dichloropropane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	2-Butanone	ug/l																			20 U	
25	NL-14	Surface Water	VOA	2-Chloroethyl vinyl ether	ug/l																				
25	NL-14	Surface Water	VOA	2-Chlorotoluene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	2-Hexanone	ug/l																			20 U	
25	NL-14	Surface Water	VOA	2-Nitropropane	ug/l																				
25	NL-14	Surface Water	VOA	3-chloropropene	ug/l																				
25	NL-14	Surface Water	VOA	4-Chlorotoluene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	4-Isopropyltoluene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	4-Methyl-2-pentanone	ug/l																			20 U	
25	NL-14	Surface Water	VOA	Acetone	ug/l																			20 U	
25	NL-14	Surface Water	VOA	Acetonitrile	ug/l																				
25	NL-14	Surface Water	VOA	Acrolein	ug/l																				
25	NL-14	Surface Water	VOA	Acrylonitrile	ug/l																				
25	NL-14	Surface Water	VOA	Benzene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Benzyl chloride	ug/l																				
25	NL-14	Surface Water	VOA	Bromoacetone	ug/l																				
25	NL-14	Surface Water	VOA	Bromobenzene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	Bromochloromethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Bromodichloromethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Bromoform	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Bromomethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	BTEX (total)	ug/l																				
25	NL-14	Surface Water	VOA	Carbon disulfide	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Carbon tetrachloride	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Chlorobenzene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Chloroethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Chloroform	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Chloromethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Chloroprene	ug/l																				
25	NL-14	Surface Water	VOA	cis-1,2-Dichloroethene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	cis-1,3-Dichloropropene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Dibromochloromethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Dibromomethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Dichlorodifluoromethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Diethyl ether	ug/l																				
25	NL-14	Surface Water	VOA	Ethyl methacrylate	ug/l																				
25	NL-14	Surface Water	VOA	Ethylbenzene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Ethylene oxide	ug/l																				
25	NL-14	Surface Water	VOA	Hexachlorobutadiene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	Hexachloroethane	ug/l																				
25	NL-14	Surface Water	VOA	Iodomethane	ug/l																				
25	NL-14	Surface Water	VOA	Isobutyl alcohol	ug/l																				
25	NL-14	Surface Water	VOA	Isopropylbenzene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	LPAH (total)	ug/l																				
25	NL-14	Surface Water	VOA	m,p-Xylene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Malononitrile	ug/l																				
25	NL-14	Surface Water	VOA	Methacrylonitrile	ug/l																				
25	NL-14	Surface Water	VOA	Methyl methacrylate	ug/l																				
25	NL-14	Surface Water	VOA	Methyl Tert-Butyl Ether	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Methylene chloride	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	Naphthalene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	n-Butylbenzene	ug/l																			2.0 U	

Table C-2-F
Summary of Chemicals in Surface Water at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	Analyte	Units	Concentration																			
						3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	NL-14	Surface Water	VOA	NCPAH (total)	ug/l																				
25	NL-14	Surface Water	VOA	Nitrobenzene	ug/l																				
25	NL-14	Surface Water	VOA	n-Propylbenzene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	o-Xylene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Propargyl alcohol	ug/l																				
25	NL-14	Surface Water	VOA	sec-Butylbenzene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	Styrene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	tert-Butylbenzene	ug/l																			2.0 U	
25	NL-14	Surface Water	VOA	Tetrachloroethene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Toluene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	trans-1,2-Dichloroethene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	trans-1,3-Dichloropropene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	trans-1,4-Dichloro-2-butene	ug/l																				
25	NL-14	Surface Water	VOA	Trichloroethene	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Trichlorofluoromethane	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Vinyl acetate	ug/l																				
25	NL-14	Surface Water	VOA	Vinyl chloride	ug/l																			0.50 U	
25	NL-14	Surface Water	VOA	Xylenes	ug/l																				
25	NL-14	Surface Water	VOA	Xylenes (total)	ug/l																				

Notes:

Blank cells in the concentration columns indicate that a sample was not collected from that location or the sample was not analyzed for that chemical.
J - estimated value
U - not detected, value shown is the quantitation limit
UJ - Estimated quantitation limit
ug/l - microgram/liter

Table C-2-G
Summary of Chemicals in Groundwater at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																			
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	A-2	Groundwater	DIN	7429-90-5	Aluminum	ug/l											2.83		14.5 J	32.0 U	1.7 J 1.1 J	13.0 21.3	3.0 3.0	6.2 3.3	2.7 2.9	4.3 4.4
25	A-2	Groundwater	DIN	7440-36-0	Antimony	ug/l											0.224	1 U	1 U	0.056 U	0.09 U 0.09 U	0.090 U 0.090 U	0.090 U 0.090 U	0.05 UJ 0.05 UJ	0.05 U 0.05 U	0.03 J 0.05 U
25	A-2	Groundwater	DIN	7440-38-2	Arsenic	ug/l											1.62	0.44 J	1.87	1.2	1.47 1.59	1.71 1.66	1.5 1.4	1.83 1.95	1.5 1.5	1.5 1.4
25	A-2	Groundwater	DIN	7440-39-3	Barium	ug/l											13.8									
25	A-2	Groundwater	DIN	7440-41-7	Beryllium	ug/l											0.15 U	1 U	1 U	0.043 U	0.020 U 0.020 U	0.020 U 0.020 U	0.020 U 0.020 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U
25	A-2	Groundwater	DIN	7440-43-9	Cadmium	ug/l											0.2 U	1 U	0.1 U	0.094 U	0.014 J 0.020 UJ	0.020 U 0.020 U	0.020 U 0.020 U	0.015 J 0.013 J	0.005 J 0.005 J	0.030 U 0.030 U
25	A-2	Groundwater	DIN	7440-70-2	Calcium	ug/l											40000									
25	A-2	Groundwater	DIN	7440-47-3	Chromium	ug/l											0.982	1 U	1 U	1.00 U	0.24 J 0.27 J	0.20 U 0.20 U	0.06 J 0.06 J	0.20 U 0.20 U	1.11 0.09 J	0.05 J 0.20 U
25	A-2	Groundwater	DIN	7440-48-4	Cobalt	ug/l											3.62									
25	A-2	Groundwater	DIN	7440-50-8	Copper	ug/l											0.916	2 UJ	2 U	0.76 J	0.49 J 0.36 J	0.28 U 0.37	0.15 0.18	0.29 U 0.18 U	0.19 0.21	0.25 0.29
25	A-2	Groundwater	DIN	7439-89-6	Iron	ug/l											3100									
25	A-2	Groundwater	DIN	7439-92-1	Lead	ug/l											0.1 U	1 UJ	1 U	0.23 J	0.030 U 0.030 U	0.030 U 0.031 U	0.030 U 0.030 U	0.030 U 0.030 U	0.009 J 0.014 J	0.014 J 0.014 J
25	A-2	Groundwater	DIN	7439-95-4	Magnesium	ug/l											5600									
25	A-2	Groundwater	DIN	7439-96-5	Manganese	ug/l											354									
25	A-2	Groundwater	DIN	7439-97-6	Mercury	ug/l											0.2 U	0.2 U	0.2 U	0.0260 UJ	0.20 U 0.20 U	0.20 U 0.20 U	0.20 U 0.20 U	0.20 UJ 0.20 UJ	0.20 U 0.20 U	0.20 U 0.20 U
25	A-2	Groundwater	DIN	7440-02-0	Nickel	ug/l											3.11	6.01	2.58	3.0	2.48 2.76	3.04 3.37	2.19 2.14	2.72 2.87	2.28 1.82	2.06 2.03
25	A-2	Groundwater	DIN	7440-09-7	Potassium	ug/l											3900									
25	A-2	Groundwater	DIN	7782-49-2	Selenium	ug/l											0.5 U	1 U	2 U	0.43 UJ	1.0 U 1.0 U	1.2 U 1.2 U	1.2 U 1.2 U	1.5 U 1.5 U	1.5 U 0.3 J	0.3 J 01.5 U
25	A-2	Groundwater	DIN	7440-22-4	Silver	ug/l											0.1 U	0.08 UJ	1 U	0.085 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U
25	A-2	Groundwater	DIN	7440-23-5	Sodium	ug/l											19000									
25	A-2	Groundwater	DIN	7440-28-0	Thallium	ug/l											0.05 U	1 U	1 U	0.044 U	0.020 U 0.020 U	0.020 U 0.020 U	0.020 U 0.020 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U
25	A-2	Groundwater	DIN	7440-62-2	Vanadium	ug/l											5 U									
25	A-2	Groundwater	DIN	7440-66-6	Zinc	ug/l											2.27	3.35 J	5 U	6.8 J	6.62 5.82	3.23 2.80	2.9 2.7	4.61 5.78	2.70 2.65	4.26 4.44
25	A-2	Groundwater	TIN	7429-90-5	Aluminum	ug/l						61	43 U	282	200 U	507	221		96.8	32.0 U	36.0 37.8	2690 2940	147 164	55.0 61.0	15.1 9.6	41.7 42.0
25	A-2	Groundwater	TIN	7440-36-0	Antimony	ug/l						0.2 U	0.16 J	1.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.056 U	0.09 U 0.09 U	0.090 U 0.093	0.090 U 0.090 U	0.05 UJ 0.05 UJ	0.05 U 0.05 U	0.03 J 0.05 U
25	A-2	Groundwater	TIN	7440-38-2	Arsenic	ug/l	2.5 J	1.9	1 U	1 U		2 U	1.9 J	2.9 U	5 U	1.83	1.52	0.73 J	2.7	1.3	1.89 2.01	2.08 2.05	1.6 1.6	1.85 1.91	1.6 1.5	1.6 1.6
25	A-2	Groundwater	TIN	7440-39-3	Barium	ug/l	8.6 J	9 J	9.1 J	7.6 J		13	7.2 J	7.8 J	11.1	14.8	13.5									
25	A-2	Groundwater	TIN	7440-41-7	Beryllium	ug/l						0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.008 J 0.008 J	0.053 0.058	0.013 J 0.012 J	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U
25	A-2	Groundwater	TIN	7440-43-9	Cadmium	ug/l	1.7 J	2 U	5 U	2 U		0.2 U	0.053 U	0.3 U	2 U	0.2 U	0.2 U	1 U	0.1 U	0.094 U	0.023 0.026	0.078 0.095	0.020 U 0.022 U	0.026 J 0.027 J	0.010 J 0.007 J	0.030 U 0.030 U
25	A-2	Groundwater	TIN	7440-70-2	Calcium	ug/l	34900	34000	32700	32100		40700	30700	33600	39400	40200										
25	A-2	Groundwater	TIN	7440-47-3	Chromium	ug/l	4 U	6 U	6 U	9 U		5 U	0.6 J	0.5 J	6 U	0.968	0.423	1 U	1 U	1.00 U	0.36 J 0.40 J	4.06 4.66	0.31 0.37	0.05 J 0.09 J	0.19 J 0.33	0.20 U 0.20 U
25	A-2	Groundwater	TIN	7440-48-4	Cobalt	ug/l						10 U	3.9 J	2.5 J	1.92	1.64	1.34									
25	A-2	Groundwater	TIN	7440-50-8	Copper	ug/l	3.2 J	4 U	3 U	3 U		2 U	1.8 J	1.1 U	6 U	8.12	4.13 J	0.98 J	2.31	0.93 J	1.05 J 1.08 J	26.3 30.8	2.60 2.79	1.58 1.66	0.38 0.31	0.87 J 0.82
25	A-2	Groundwater	TIN	7439-89-6	Iron	ug/l	5250	4910	4640	4680		3720	4070	4320	4040	3890										
25	A-2	Groundwater	TIN	7439-92-1	Lead	ug/l	1 U	1 U	1 U	1 U		0.2 U	0.26 J	1.6 U	2 U	0.841	0.15 U	1 U	0.229 J	0.078 J	0.109 0.134	0.966 1.180	0.131 0.136	0.083 0.086	0.048 0.028 J	0.083 0.084
25	A-2	Groundwater	TIN	7439-95-4	Magnesium	ug/l	4750	4630 J	4360 J	4250 J		5730	4150	4490 J	5420	5980										
25	A-2	Groundwater	TIN	7439-96-5	Manganese	ug/l	397	384	371	355		374	308	323	325	359	332									
25	A-2	Groundwater	TIN	7439-97-6	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0260 UJ	0.20 U 0.20 U	0.20 U 0.20 U	0.20 U 0.20 U	0.20 UJ 0.20 UJ	0.20 U 0.20 U	0.20 U 0.20 U
25	A-2	Groundwater	TIN	7440-02-0	Nickel	ug/l						20 U	2.3 J	1.6 J	2.65	4.59	3.77	2.64	2.64	3.0	2.91 2.99	8.39 9.39	2.47 2.46	3.12 3.11	1.93 1.95	2.49 J 2.53
25	A-2	Groundwater	TIN	7440-09-7	Potassium	ug/l	2690 J	2680 J	2630 J	2460 J		2100	2400	2570 J	3290	3630										

Table C-2-G
Summary of Chemicals in Groundwater at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																			
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	A-2	Groundwater	TIN	7782-49-2	Selenium	ug/l	1 U	1 U	5 U	1 U		2 U	1 J	1.1 J	5 U	0.5 U	0.5 U	1 U	2 U	0.32 UJ	1.0 U 1.0 U	1.2 U 1.2 U	1.2 U 1.2 U	1.5 U 1.5 U	1.5 U 0.4 J	0.5 J 0.3 J
25	A-2	Groundwater	TIN	7440-22-4	Silver	ug/l	3 U	3 U	3.5 J	3 U		0.2 U	0.5 U	0.7 U	2 U	0.35 U	0.35 U	1 U	1 U	0.085 U	0.030 U 0.030 U	0.040 0.040	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U
25	A-2	Groundwater	TIN	7440-23-5	Sodium	ug/l	16600	16300	14900	14500		17800	14600	12000 J		16500										
25	A-2	Groundwater	TIN	7440-28-0	Thallium	ug/l						0.2 U	0.26 J	3.5 U	2 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U 0.020 U	0.031 U 0.029 U	0.020 U 0.020 U	0.030 U 0.030 U	0.030 U 0.030 U	0.030 U 0.030 U
25	A-2	Groundwater	TIN	7440-62-2	Vanadium	ug/l						10 U	0.5 J	0.3 U	20 U	1.12	1 U									
25	A-2	Groundwater	TIN	7440-66-6	Zinc	ug/l	15.5 J	14.1 J	10.6 J	10.7 J		10 U	16.4	13.5 J	25 U	15.9	3.56	3.15 J	5.72 J	7.8 J	6.87 7.74	16.1 14.7	3.8 4.0	4.27 4.82	3.05 2.85	4.59 4.37
25	A-2	Groundwater	VOA	630-20-6	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	71-55-6	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	79-34-5	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	79-00-5	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	76-13-1	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U									
25	A-2	Groundwater	VOA	75-34-3	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	75-35-4	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	563-58-6	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	87-61-6	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 UJ	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	96-18-4	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	120-82-1	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U		2.0 U 2.0 U		2.0 U 2.0 U	2.0 U 2.0 U
25	A-2	Groundwater	VOA	95-63-6	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	96-12-8	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U				1 U		2.5 U	10 U	10 U	5 U	5 U	1.0 U	2.0 U 2.0 U		2.0 U 2.0 U		2.0 U 2.0 U	2.0 U 2.0 U
25	A-2	Groundwater	VOA	106-93-4	1,2-Dibromoethane	ug/l	1 U	1 U	1 U				1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U		2.0 U 2.0 U		2.0 U 2.0 U	2.0 U 2.0 U
25	A-2	Groundwater	VOA	95-50-1	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U				1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	107-06-2	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	540-59-0	1,2-Dichloroethene	ug/l						0.5 U														
25	A-2	Groundwater	VOA	78-87-5	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	108-67-8	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	96-23-1	1,3-Dichloro-2-propanol	ug/l	50 U	100 U	100 U																	
25	A-2	Groundwater	VOA	541-73-1	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U				1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.11 J 0.11 J		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	142-28-9	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	542-75-6	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1													
25	A-2	Groundwater	VOA	1476-11-5	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U	5 U																	
25	A-2	Groundwater	VOA	106-46-7	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U				1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	123-91-1	1,4-Dioxane	ug/l	250 U	250 U	250 U																	
25	A-2	Groundwater	VOA	590-20-7	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	78-93-3	2-Butanone	ug/l	5 U	5 U	5 U	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U	10 U	5.0 U	20 UR 20 UR				20 U 20 U	
25	A-2	Groundwater	VOA	110-75-8	2-Chloroethyl vinyl ether	ug/l	50 U	10 U	10 U						10 U	10 U	10 U									
25	A-2	Groundwater	VOA	95-49-8	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	

Table C-2-G
Summary of Chemicals in Groundwater at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																			
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	A-2	Groundwater	VOA	591-78-6	2-Hexanone	ug/l	5 U	5 U	5 U	5 U		20 U	5 U	5 U	10 U	20 U	20 U	10 U	10 U	5.0 UJ	20 UR 20 UR				20 U 20 U	
25	A-2	Groundwater	VOA	79-46-9	2-Nitropropane	ug/l	10 U	10 U	10 U																	
25	A-2	Groundwater	VOA	16136-84-8	3-chloropropene	ug/l	5 U	5 U	5 U																	
25	A-2	Groundwater	VOA	106-43-4	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	99-87-6	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	108-10-1	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	5 U		20 U	5 U	5 U	10 U	20 U	20 U	5 U	5 U	5.0 U	20 UR 20 UR				20 U 20 U	
25	A-2	Groundwater	VOA	67-64-1	Acetone	ug/l	5 U	5 U	5 U	5 U		20 U	5 U	5 U		50 U	50 U	25 U	25 U	5.0 U	20 UR 20 UR		20 U 20 U		20 U 20 U	20 U 20 U
25	A-2	Groundwater	VOA	75-05-8	Acetonitrile	ug/l	5 U	5 U	5 U																	
25	A-2	Groundwater	VOA	107-02-8	Acrolein	ug/l	100 U	25 U	25 U																	
25	A-2	Groundwater	VOA	107-13-1	Acrylonitrile	ug/l	50 U	10 U	10 U							10 U	10 U									
25	A-2	Groundwater	VOA	71-43-2	Benzene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	100-44-7	Benzyl chloride	ug/l	5 U	5 U	5 U																	
25	A-2	Groundwater	VOA	598-31-2	Bromoacetone	ug/l	2000 U	2000 U	2000 U																	
25	A-2	Groundwater	VOA	108-86-1	Bromobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	74-97-5	Bromochloromethane	ug/l							1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	75-27-4	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	75-25-2	Bromoform	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	74-83-9	Bromomethane	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	2 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ 0.50 UJ				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	-71	BTEX (total)	ug/l	1 U	1 U	1 U	1 U		0.5 U	1													
25	A-2	Groundwater	VOA	75-15-0	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	10 U	2 U	2 U	10 U	10 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.070 J	0.50 U 0.50 U
25	A-2	Groundwater	VOA	56-23-5	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	108-90-7	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	75-00-3	Chloroethane	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	67-66-3	Chloroform	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	74-87-3	Chloromethane	ug/l	1 U	1 U	44	1 U		0.5 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U 0.50 U		0.060 J 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	126-99-8	Chloroprene	ug/l	50 U	10 U	10 U																	
25	A-2	Groundwater	VOA	156-59-2	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U			1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	10061-01-5	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	124-48-1	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	74-95-3	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	75-71-8	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	5 U	5 U	5 U	5 U	1.0 UJ	0.50 UJ 0.50 UJ				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	60-29-7	Diethyl ether	ug/l	10 U	10 U	10 U																	
25	A-2	Groundwater	VOA	97-63-2	Ethyl methacrylate	ug/l	5 U	5 U	5 U																	
25	A-2	Groundwater	VOA	100-41-4	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	75-21-8	Ethylene oxide	ug/l	250 U	25 U	25 U																	
25	A-2	Groundwater	VOA	87-68-3	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U	4 U	1.0 UJ	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	67-72-1	Hexachloroethane	ug/l	10 U	10 U	10 U																	
25	A-2	Groundwater	VOA	74-88-4	Iodomethane	ug/l	5 U	5 U	5 U							5 U	5 U									
25	A-2	Groundwater	VOA	78-83-1	Isobutyl alcohol	ug/l	100 U	100 U	100 U																	

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SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																			
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	A-2	Groundwater	VOA	98-82-8	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	-64	LPAH (total)	ug/l	1 U	1 U	1 U																	
25	A-2	Groundwater	VOA	-81	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	2 U	2 U	2.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	109-77-3	Malononitrile	ug/l	1000000 U																			
25	A-2	Groundwater	VOA	126-98-7	Methacrylonitrile	ug/l	5 U	5 U	5 U																	
25	A-2	Groundwater	VOA	80-62-6	Methyl methacrylate	ug/l	5 U	5 U	5 U																	
25	A-2	Groundwater	VOA	1634-04-4	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	75-09-2	Methylene chloride	ug/l	1 U	1 U	1 U	1 U		1 U	2 U	1 U	5 U	5 U	0.67 U	5 U	2 U	1.0 U	2.0 U 2.0 U		2.0 U 2.0 U		2.0 U 2.0 U	2.0 U 2.0 U
25	A-2	Groundwater	VOA	91-20-3	Naphthalene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1.71 J	1.44 J	1.1	2.0 U 0.35 J				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	104-51-8	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U	5 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	-150	NCPAH (total)	ug/l	1 U	1 U	1 U																	
25	A-2	Groundwater	VOA	98-95-3	Nitrobenzene	ug/l	**100 U**	**25 U**	**25 U**																	
25	A-2	Groundwater	VOA	103-65-1	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	95-47-6	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	107-19-7	Propargyl alcohol	ug/l	1000 U	1000 U	1000 U																	
25	A-2	Groundwater	VOA	135-98-8	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	100-42-5	Styrene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 UJ	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	98-06-6	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U 2.0 U				2.0 U 2.0 U	
25	A-2	Groundwater	VOA	127-18-4	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	108-88-3	Toluene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.40 J 2.1		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	156-60-5	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U			1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	10061-02-6	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	110-57-6	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U	5 U							10 U	10 U									
25	A-2	Groundwater	VOA	79-01-6	Trichloroethene	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	75-69-4	Trichlorofluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U 0.50 U				0.50 U 0.50 U	
25	A-2	Groundwater	VOA	108-05-4	Vinyl acetate	ug/l	10 U	5 U	5 U							5 U	5 U									
25	A-2	Groundwater	VOA	75-01-4	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U		0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U	1 U	1.0 U	0.50 U 0.50 U		0.50 U 0.50 U		0.50 U 0.50 U	0.50 U 0.50 U
25	A-2	Groundwater	VOA	1330-20-7	Xylenes	ug/l						0.5 U	1 U		2 U											
25	A-2	Groundwater	VOA	-72	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U		0.5 U	1													
25	A-3	Groundwater	DIN	7429-90-5	Aluminum	ug/l											928		1260	504	1460	781	672	3390	632	261
25	A-3	Groundwater	DIN	7440-36-0	Antimony	ug/l											0.241	1 U	1 U	0.11 UJ	0.12	0.090 U	0.090 U	0.05 U	0.05 U	0.05 U
25	A-3	Groundwater	DIN	7440-38-2	Arsenic	ug/l											0.15 U	1 UJ	1 U	0.10 U	0.45 J	0.24 J	0.5 U	0.50 U	0.50 U	0.10 J
25	A-3	Groundwater	DIN	7440-39-3	Barium	ug/l											4.81									
25	A-3	Groundwater	DIN	7440-41-7	Beryllium	ug/l											0.15 U	1 U	1 U	0.043 U	0.027	0.023	0.012 J	0.063	0.030 U	0.030 U
25	A-3	Groundwater	DIN	7440-43-9	Cadmium	ug/l											0.2 U	1 UJ	0.1 U	0.18	0.054	0.042 U	0.086	0.146	0.145	0.031 U
25	A-3	Groundwater	DIN	7440-70-2	Calcium	ug/l											7800									
25	A-3	Groundwater	DIN	7440-47-3	Chromium	ug/l											1.41	4.14	1 U	1.0 U	2.14	0.20 U	0.16 J	11.2	0.25	0.35
25	A-3	Groundwater	DIN	7440-48-4	Cobalt	ug/l											7.28									
25	A-3	Groundwater	DIN	7440-50-8	Copper	ug/l											132	234	220	92.8	163 J	96.9	109	128	97.1	44.8
25	A-3	Groundwater	DIN	7439-89-6	Iron	ug/l											4000									
25	A-3	Groundwater	DIN	7439-92-1	Lead	ug/l											0.163	1 UJ	1 U	0.075 U	0.294	0.094	0.051	1.060	0.047	0.026 J
25	A-3	Groundwater	DIN	7439-95-4	Magnesium	ug/l											2100									
25	A-3	Groundwater	DIN	7439-96-5	Manganese	ug/l											31									
25	A-3	Groundwater	DIN	7439-97-6	Mercury	ug/l											0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
25	A-3	Groundwater	DIN	7440-02-0	Nickel	ug/l											2.29	3.79	2.16	1.5 J	1.68	1.55	0.97	9.30	1.36	5.15
25	A-3	Groundwater	DIN	7440-09-7	Potassium	ug/l											1900									

Table C-2-G
Summary of Chemicals in Groundwater at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																			
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	A-3	Groundwater	DIN	7782-49-2	Selenium	ug/l											0.5 U	1.12 U	2 U	0.60 UJ	2.0 U	1.2 U	1.2 U	1.5 U	0.5 J	0.6 J
25	A-3	Groundwater	DIN	7440-22-4	Silver	ug/l											0.1 U	1 U	1 U	0.085 U	0.013 J	0.020 J	0.030 U	0.031 U	0.030 U	0.030 U
25	A-3	Groundwater	DIN	7440-23-5	Sodium	ug/l											10000									
25	A-3	Groundwater	DIN	7440-28-0	Thallium	ug/l											0.05 U	1 U	1 U	0.044 U	0.011 J	0.022 U	0.020 U	0.040	0.030 U	0.030 U
25	A-3	Groundwater	DIN	7440-62-2	Vanadium	ug/l											5 U									
25	A-3	Groundwater	DIN	7440-66-6	Zinc	ug/l											10.5	9.91	6.78 J	6.0	7.33	5.02	20.2	15.1	4.91	3.49
25	A-3	Groundwater	TIN	7429-90-5	Aluminum	ug/l					861	3530	15600	1730	31600	1150	153000		2140	822	1420	3210	1020	38600	1500	508
25	A-3	Groundwater	TIN	7440-36-0	Antimony	ug/l					5 U	0.2 U	0.21 J	1.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.056 U	0.12	0.090 U	0.090 U	0.12 UJ	0.05 U	0.04 J
25	A-3	Groundwater	TIN	7440-38-2	Arsenic	ug/l					2 U	2 U	0.47 J	2.9 U	5 U	1 U	4.52	1 U	1 U	0.10 U	0.40 J	0.27 J	0.5 U	0.71	0.09 J	0.10 J
25	A-3	Groundwater	TIN	7440-39-3	Barium	ug/l					4 J	17	81.4	5.9 J	140	4.68	547									
25	A-3	Groundwater	TIN	7440-41-7	Beryllium	ug/l					0.26 U	0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.827	1 U	1 U	0.043 U	0.026	0.043	0.016 J	0.367	0.033	0.030 U
25	A-3	Groundwater	TIN	7440-43-9	Cadmium	ug/l					0.057 UJ	0.4	0.18 J	0.3 U	2 U	0.2 U	0.46	1 U	0.18	0.094 U	0.047	0.037 U	0.090	0.221	0.083	0.032 U
25	A-3	Groundwater	TIN	7440-70-2	Calcium	ug/l					5050	5360	7990	5950	10500	5480										
25	A-3	Groundwater	TIN	7440-47-3	Chromium	ug/l					4 UJ	9	52.7	1.1 J	79.3	1.27	323	7.73	3.18	1.4 J	1.98	5.75	1.67	107	3.28	1.01
25	A-3	Groundwater	TIN	7440-48-4	Cobalt	ug/l					4 U	10 U	3.9 J	3.1 J	5.34	2.05	17.5									
25	A-3	Groundwater	TIN	7440-50-8	Copper	ug/l					81.1	74	227	232	318	134	1180	273	198	115	157 J	106	104	531	103	56.9 J
25	A-3	Groundwater	TIN	7439-89-6	Iron	ug/l					928	4630	18000	298	41300	637										
25	A-3	Groundwater	TIN	7439-92-1	Lead	ug/l					2 U	0.7	5	1.6 U	8.53	0.15 U	36.9	0.48 J	0.443 J	0.12 J	0.286	0.710	0.165	13.3	0.291	0.072
25	A-3	Groundwater	TIN	7439-95-4	Magnesium	ug/l					1810	3410	8350	2190 J	16300	2200										
25	A-3	Groundwater	TIN	7439-96-5	Manganese	ug/l					25	43	159	24.5	269	19.6	1320									
25	A-3	Groundwater	TIN	7439-97-6	Mercury	ug/l					0.26	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
25	A-3	Groundwater	TIN	7440-02-0	Nickel	ug/l					6.3 J	20 U	15.1 J	2.4 J	20	1.78	113	3.72	2.68	1.6 J	1.75	2.03	1.18	26.9	1.82	5.20 J
25	A-3	Groundwater	TIN	7440-09-7	Potassium	ug/l					896	2000 U	1810	770 J	3450	767										
25	A-3	Groundwater	TIN	7782-49-2	Selenium	ug/l					3 U	2 U	1.1 J	1.1 U	5 U	0.5 U	7	1 U	2 U	0.62 UJ	2.0 U	0.6 J	1.2 U	1.5 U	0.6 J	0.7 J
25	A-3	Groundwater	TIN	7440-22-4	Silver	ug/l					4 U	0.2 U	0.5 J	0.7 U	2 U	0.35 U	1.89	1 U	1 U	0.085 U	0.009 J	0.026 J	0.030 U	0.405	0.030 U	0.030 U
25	A-3	Groundwater	TIN	7440-23-5	Sodium	ug/l					10700	10800	11000	8420		10600										
25	A-3	Groundwater	TIN	7440-28-0	Thallium	ug/l					10 U	0.2 U	0.32 J	3.5 U	2 U	0.25 U	0.677	1 U	1 U	0.044 U	0.010 J	0.040 U	0.020 U	0.254	0.030 U	0.030 U
25	A-3	Groundwater	TIN	7440-62-2	Vanadium	ug/l					3 U	10 U	37.6	0.7 J	71.4	1.24	299									
25	A-3	Groundwater	TIN	7440-66-6	Zinc	ug/l					28.5 U	11	21.5	9.3 J	34.9	4.81	192	11	9.18 J	8.3 J	7.46	6.40	23.1	44.5	5.69	3.62
25	A-3	Groundwater	VOA	630-20-6	1,1,1,2-Tetrachloroethane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	71-55-6	1,1,1-Trichloroethane	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	79-34-5	1,1,2,2-Tetrachloroethane	ug/l					1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	79-00-5	1,1,2-Trichloroethane	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	76-13-1	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U									
25	A-3	Groundwater	VOA	75-34-3	1,1-Dichloroethane	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	75-35-4	1,1-Dichloroethene	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	563-58-6	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	87-61-6	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	96-18-4	1,2,3-Trichloropropane	ug/l									2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	120-82-1	1,2,4-Trichlorobenzene	ug/l							1 U		2 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	A-3	Groundwater	VOA	95-63-6	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	96-12-8	1,2-Dibromo-3-chloropropane	ug/l					1 U		1 U		2.5 U	10 U	10 U	5 U	5 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	A-3	Groundwater	VOA	106-93-4	1,2-Dibromoethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	A-3	Groundwater	VOA	95-50-1	1,2-Dichlorobenzene	ug/l					1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	107-06-2	1,2-Dichloroethane	ug/l					1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	540-59-0	1,2-Dichloroethene	ug/l						0.5 U														
25	A-3	Groundwater	VOA	78-87-5	1,2-Dichloropropane	ug/l					1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	108-67-8	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	541-73-1	1,3-Dichlorobenzene	ug/l					1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	142-28-9	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	542-75-6	1,3-Dichloropropene	ug/l					1 U	0.5 U														
25	A-3	Groundwater	VOA	106-46-7	1,4-Dichlorobenzene	ug/l					1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	590-20-7	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	78-93-3	2-Butanone	ug/l						20 U	5 U	5 U	50 U	50 U	50 U	10 U	10 U	5.0 U	20 UR				20 U	
25	A-3	Groundwater	VOA	110-75-8	2-Chloroethyl vinyl ether	ug/l									10 U	10 U	10 U									
25	A-3	Groundwater	VOA	95-49-8	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	591-78-6	2-Hexanone	ug/l					5 U	20 U	5 U	5 U	10 U	20 U	20 U	10 U	10 U	5.0 U	20 UR				20 U	
25	A-3	Groundwater	VOA	106-43-4	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	99-87-6	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	108-10-1	4-Methyl-2-pentanone	ug/l					5 U	20 U	5 U	5 U	10 U	20 U	20 U	5 U	5 U	5.0 U	20 UR				20 U	
25	A-3	Groundwater	VOA	67-64-1	Acetone	ug/l						20 U	5 U	5 U		50 U	50 U	25 U	25 U	15	20 UR		5.5 J		20 U	20 U
25	A-3	Groundwater	VOA	107-13-1	Acrylonitrile	ug/l										10 U	10 U									
25	A-3	Groundwater	VOA	71-43-2	Benzene	ug/l					1 U	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	108-86-1	Bromobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	

Table C-2-G
Summary of Chemicals in Groundwater at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																			
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	A-3	Groundwater	VOA	74-97-5	Bromochloromethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	75-27-4	Bromodichloromethane	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	75-25-2	Bromoform	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	74-83-9	Bromomethane	ug/l					1 U	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ				0.50 U	
25	A-3	Groundwater	VOA	-71	BTEX (total)	ug/l					1 U	0.5 U														
25	A-3	Groundwater	VOA	75-15-0	Carbon disulfide	ug/l					1 UJ	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U	10 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	56-23-5	Carbon tetrachloride	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	108-90-7	Chlorobenzene	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	75-00-3	Chloroethane	ug/l					1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	67-66-3	Chloroform	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	74-87-3	Chloromethane	ug/l					1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	156-59-2	cis-1,2-Dichloroethene	ug/l					1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	10061-01-5	cis-1,3-Dichloropropene	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	124-48-1	Dibromochloromethane	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	74-95-3	Dibromomethane	ug/l									2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	75-71-8	Dichlorodifluoromethane	ug/l								1 U	1 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ				0.50 U	
25	A-3	Groundwater	VOA	100-41-4	Ethylbenzene	ug/l					1 U	0.5 U	1 U	1	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	87-68-3	Hexachlorobutadiene	ug/l									2 U	2 U	2 U	4 U	4 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	74-88-4	Iodomethane	ug/l										5 U	5 U									
25	A-3	Groundwater	VOA	98-82-8	Isopropylbenzene	ug/l									1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	-81	m,p-Xylene	ug/l								3.2		2 U	2 U	2 U	2 U	2.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	1634-04-4	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	75-09-2	Methylene chloride	ug/l					2 U	1 U	2 U	1 U	5 U	5 U	1.3 U	5 U	2 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	A-3	Groundwater	VOA	91-20-3	Naphthalene	ug/l									2 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	104-51-8	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U	5 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	103-65-1	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	95-47-6	o-Xylene	ug/l								0.9 J		2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	135-98-8	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	100-42-5	Styrene	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	98-06-6	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-3	Groundwater	VOA	127-18-4	Tetrachloroethene	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	108-88-3	Toluene	ug/l					1 U	0.5 U	1 U	0.5 J	1 U	2 U	2 U	1 U	1 U	1.0 U	0.56		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	156-60-5	trans-1,2-Dichloroethene	ug/l					1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	10061-02-6	trans-1,3-Dichloropropene	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	110-57-6	trans-1,4-Dichloro-2-butene	ug/l										10 U	10 U									
25	A-3	Groundwater	VOA	79-01-6	Trichloroethene	ug/l					1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.14 J		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	75-69-4	Trichlorofluoromethane	ug/l								1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-3	Groundwater	VOA	108-05-4	Vinyl acetate	ug/l										5 U	5 U									
25	A-3	Groundwater	VOA	75-01-4	Vinyl chloride	ug/l					1 U	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-3	Groundwater	VOA	1330-20-7	Xylenes	ug/l					1 U	0.5 U	1 U		2 U											
25	A-3	Groundwater	VOA	-72	Xylenes (total)	ug/l					1 U	0.5 U														
25	A-5	Groundwater	DIN	7429-90-5	Aluminum	ug/l											2.81		3.43 J	32.0 U	2.1	2.7	2.7	2.0 U	1.9 J	2.6 U
25	A-5	Groundwater	DIN	7440-36-0	Antimony	ug/l											0.174	1 U	1 U	0.056 U	0.09 U	0.090 U	0.090 U	0.05 U	0.05 U	0.05 U
25	A-5	Groundwater	DIN	7440-38-2	Arsenic	ug/l											0.277	1 UJ	1 U	0.10 U	0.66	0.48 J	0.2 J	0.50 U	0.19 J	0.25 J
25	A-5	Groundwater	DIN	7440-39-3	Barium	ug/l											4.54									
25	A-5	Groundwater	DIN	7440-41-7	Beryllium	ug/l											0.15 U	1 U	1 U	0.043 U	0.020 U	0.020 U	0.020 U	0.030 U	0.030 U	0.030 U
25	A-5	Groundwater	DIN	7440-43-9	Cadmium	ug/l											0.2 U	1 U	0.1 U	0.094 UJ	0.020 UJ	0.020 U	0.020 U	0.030 U	0.030 U	0.030 U
25	A-5	Groundwater	DIN	7440-70-2	Calcium	ug/l											25000									
25	A-5	Groundwater	DIN	7440-47-3	Chromium	ug/l											1.53	1 U	1 U	1.0 U	0.39 J	0.20 U	0.07 J	0.20 U	0.07 J	0.20 U
25	A-5	Groundwater	DIN	7440-48-4	Cobalt	ug/l											8.91									
25	A-5	Groundwater	DIN	7440-50-8	Copper	ug/l											2.38	2 U	2 U	2.0 U	0.84	0.20 UJ	0.31	0.41	0.44	0.52
25	A-5	Groundwater	DIN	7439-89-6	Iron	ug/l											3100									
25	A-5	Groundwater	DIN	7439-92-1	Lead	ug/l											0.181	1 U	1 U	0.075 U	0.030 U	0.030 U	0.030 U	0.030 U	0.021 J	0.009 J
25	A-5	Groundwater	DIN	7439-95-4	Magnesium	ug/l											3300									
25	A-5	Groundwater	DIN	7439-96-5	Manganese	ug/l											144									
25	A-5	Groundwater	DIN	7439-97-6	Mercury	ug/l											0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
25	A-5	Groundwater	DIN	7440-02-0	Nickel	ug/l											2.37	4.12 J	1.85 J	2.7	2.69	1.92	1.96	2.36	1.88	2.05
25	A-5	Groundwater	DIN	7440-09-7	Potassium	ug/l											2900									
25	A-5	Groundwater	DIN	7782-49-2	Selenium	ug/l											0.5 U	0.9 UJ	2 U	2.0 U	1.1 J	1.2 U	1.2 U	1.5 U	0.4 J	0.4 J
25	A-5	Groundwater	DIN	7440-22-4	Silver	ug/l											0.1 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
25	A-5	Groundwater	DIN	7440-23-5	Sodium	ug/l											13000									
25	A-5	Groundwater	DIN	7440-28-0	Thallium	ug/l											0.05 U	1 U	1 U	0.044 U	0.020 U	0.020 U	0.020 U	0.030 U	0.030 U	0.030 U
25	A-5	Groundwater	DIN	7440-62-2	Vanadium	ug/l											5 U									
25	A-5	Groundwater	DIN	7440-66-6	Zinc	ug/l											7.3	4.95 J	5.36 J	5.4 J	6.45	5.16	4.1	5.04	4.43	4.49

Table C-2-G
Summary of Chemicals in Groundwater at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																			
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	A-5	Groundwater	TIN	7429-90-5	Aluminum	ug/l					1530		43 J	80.6 U	205 U	50.5	61.2		23.4 J	32.0 U	51.4	26.4	11.0	5.1	2.4	163
25	A-5	Groundwater	TIN	7440-36-0	Antimony	ug/l					0.044 U		0.23 J	1.6 U	1.02 U	0.5 U	0.5 U	1 U	1 U	0.056 U	0.04 J	0.090 U	0.090 U	0.05 U	0.05 U	0.05 U
25	A-5	Groundwater	TIN	7440-38-2	Arsenic	ug/l	2.4 J	1.5	1 U	1 U	2 U		0.62 J	2.9 U	5.11 U	1 U	1 U	1 U	0.939 J	0.53 J	0.99	0.65	0.4 J	0.50 U	0.16 J	0.48 J
25	A-5	Groundwater	TIN	7440-39-3	Barium	ug/l	4.9 J	128 J	6 J	4.9 J	9.5 J		6.1 J	4.3 J	4.81	4.88	5.27									
25	A-5	Groundwater	TIN	7440-41-7	Beryllium	ug/l					0.26 U		0.28 U	0.6 U	1.02 U	0.5 U	0.5 U	1 U	1 U	0.043 U	0.020 U	0.020 U	0.020 U	0.030 U	0.004 J	0.030 U
25	A-5	Groundwater	TIN	7440-43-9	Cadmium	ug/l	1.4 J	2.4 J	5 U	2 U	0.057 UJ		0.15 J	0.3 U	2.05 U	0.2 U	0.2 U	1 U	0.1 U	0.094 U	0.020 UJ	0.027 U	0.020 U	0.030 U	0.030 U	0.030 U
25	A-5	Groundwater	TIN	7440-70-2	Calcium	ug/l	30400	34100	27700	27600	27900		26400	26500	25700	24900										
25	A-5	Groundwater	TIN	7440-47-3	Chromium	ug/l	4 U	20.2	6 U	9 U	4 UJ		1.1 J	0.4 J	6.14 U	0.1 U	0.202 J	0.81 J	1 U	1.0 U	0.46 J	0.20 U	0.05 J	0.20 U	0.07 J	0.32 U
25	A-5	Groundwater	TIN	7440-48-4	Cobalt	ug/l					6.8 J		6.6	5.4 J	5.4	5.99	5.89									
25	A-5	Groundwater	TIN	7440-50-8	Copper	ug/l	2 U	463	3 U	3 U	17.1		1.9 J	1.1 U	6.14 U	1.97	3.21 J	2 U	0.891 J	2.8	2.01	1.34 J	0.97	0.76	0.32	6.82
25	A-5	Groundwater	TIN	7439-89-6	Iron	ug/l	2240	108000	1800	1710	5680		1800	1830	2260	3530										
25	A-5	Groundwater	TIN	7439-92-1	Lead	ug/l	1 U	8.8	1 U	1 U	2 U		0.17 J	1.6 U	2.05 U	0.15 U	0.19	1 U	1 U	0.075 U	0.055	0.031 U	0.030 U	0.030 U	0.012 J	0.081
25	A-5	Groundwater	TIN	7439-95-4	Magnesium	ug/l	3520	22000	3240 J	3140 J	3670		3090	3070 J	3050	3160										
25	A-5	Groundwater	TIN	7439-96-5	Manganese	ug/l	151	708	138	136	153		136	133	123	133	126									
25	A-5	Groundwater	TIN	7439-97-6	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.15		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
25	A-5	Groundwater	TIN	7440-02-0	Nickel	ug/l					4 U		2.6 J	1.5 J	2.05 U	2.57	2.32	2.23	1.63 J	3.1	2.69	1.97	2.01	2.30	1.90	2.28 J
25	A-5	Groundwater	TIN	7440-09-7	Potassium	ug/l	2990 J	5070	2810 J	2960 J	2730		2590	2390 J	2430	2560										
25	A-5	Groundwater	TIN	7782-49-2	Selenium	ug/l	5 U	5 U	5 U	1 U	3 U		0.58 U	2 J	5.11 U	0.5 U	0.5 U	1 U	2 U	0.41 UJ	1.3 J	1.2 U	1.2 U	1.5 U	0.3 J	0.4 J
25	A-5	Groundwater	TIN	7440-22-4	Silver	ug/l	3 U	3 U	3 U	3 U	4 U		0.5 U	0.7 U	2.05 U	0.35 U	0.35 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
25	A-5	Groundwater	TIN	7440-23-5	Sodium	ug/l	13300	15800	12200	11900	12300		11900	9260 J		11300										
25	A-5	Groundwater	TIN	7440-28-0	Thallium	ug/l					10 U		0.7 J	3.5 U	2.05 U	0.25 U	0.25 U	1 U	1 U	0.044 U	0.020 U	0.030 U	0.020 U	0.030 U	0.030 U	0.030 U
25	A-5	Groundwater	TIN	7440-62-2	Vanadium	ug/l					3 U		0.4 J	0.3 U	20.5 U	1 U	1 U									
25	A-5	Groundwater	TIN	7440-66-6	Zinc	ug/l	8.6 J	81.5	18.5 J	10.8 J	31.7 U		6.4	7.3 J	25.6 U	22.1	5.72	5.09	5.71	7.0 J	5.67	4.61	4.2	4.84	4.29	4.68
25	A-5	Groundwater	VOA	630-20-6	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	71-55-6	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	79-34-5	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.15 J				0.50 U	
25	A-5	Groundwater	VOA	79-00-5	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	76-13-1	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U									
25	A-5	Groundwater	VOA	75-34-3	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	75-35-4	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	563-58-6	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	87-61-6	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	96-18-4	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	120-82-1	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	A-5	Groundwater	VOA	95-63-6	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	96-12-8	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U		1 U		1 U		2.5 U	10 U	10 U	5 U	5 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	A-5	Groundwater	VOA	106-93-4	1,2-Dibromoethane	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	A-5	Groundwater	VOA	95-50-1	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	107-06-2	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	78-87-5	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	108-67-8	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	96-23-1	1,3-Dichloro-2-propanol	ug/l	50 U	100 U	100 U																	
25	A-5	Groundwater	VOA	541-73-1	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.46 J		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	142-28-9	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	542-75-6	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U															
25	A-5	Groundwater	VOA	1476-11-5	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U	5 U																	
25	A-5	Groundwater	VOA	106-46-7	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	123-91-1	1,4-Dioxane	ug/l	250 U	250 U	250 U																	
25	A-5	Groundwater	VOA	590-20-7	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	78-93-3	2-Butanone	ug/l	5 U	5 U	5 U	5 U			5 U	5 U	50 U	50 U	50 U	10 U	10 U	5.0 U	20 UR				20 U	
25	A-5	Groundwater	VOA	110-75-8	2-Chloroethyl vinyl ether	ug/l	50 U	10 U	10 U						10 U	10 U	10 U									
25	A-5	Groundwater	VOA	95-49-8	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	591-78-6	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U		5 U	5 U	10 U	20 U	20 U	10 U	10 U	5.0 U	20 UR				20 U	
25	A-5	Groundwater	VOA	79-46-9	2-Nitropropane	ug/l	10 U	10 U	10 U																	
25	A-5	Groundwater	VOA	16136-84-8	3-chloropropene	ug/l	5 U	5 U	5 U																	
25	A-5	Groundwater	VOA	106-43-4	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	99-87-6	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	108-10-1	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	5 U	5 U		5 U	5 U	10 U	20 U	20 U	5 U	5 U	5.0 U	20 UR				20 U	
25	A-5	Groundwater	VOA	67-64-1	Acetone	ug/l	5 U	5 U	5 U	5 U			5 U	5 U		50 U	50 U	25 U	25 U	5.0 U	20 UR		20 U		20 U	20 U
25	A-5	Groundwater	VOA	75-05-8	Acetonitrile	ug/l	5 U	5 U	5 U																	
25	A-5	Groundwater	VOA	107-02-8	Acrolein	ug/l	100 U	25 U	25 U																	
25	A-5	Groundwater	VOA	107-13-1	Acrylonitrile	ug/l	50 U	10 U	10 U							10 U	10 U									
25	A-5	Groundwater	VOA	71-43-2	Benzene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	0.5 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	100-44-7	Benzyl chloride	ug/l	5 U	5 U	5 U																	

Table C-2-G
Summary of Chemicals in Groundwater at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																			
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	A-5	Groundwater	VOA	598-31-2	Bromoacetone	ug/l	2000 U	2000 U	2000 U																	
25	A-5	Groundwater	VOA	108-86-1	Bromobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	74-97-5	Bromochloromethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	75-27-4	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	75-25-2	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	74-83-9	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	2 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ				0.50 U	
25	A-5	Groundwater	VOA	-71	BTEX (total)	ug/l	1 U	1 U	1 U	1 U	1 U															
25	A-5	Groundwater	VOA	75-15-0	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	1 UJ		1 U	1 U	10 U	2 U	2 U	10 U	10 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	56-23-5	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	108-90-7	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	75-00-3	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	67-66-3	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	74-87-3	Chloromethane	ug/l	1 U	1 U	12	1 U	1 U		1 U	1 U	1 U	5 U	5 U	5 U	5 U	1.0 UJ	0.50 U		0.50 U		0.50 U	0.50 UJ
25	A-5	Groundwater	VOA	126-99-8	Chloroprene	ug/l	50 U	10 U	10 U																	
25	A-5	Groundwater	VOA	156-59-2	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	10061-01-5	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	124-48-1	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	74-95-3	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	75-71-8	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	5 U	5 U	5 U	5 U	1.0 UJ	0.50 UJ				0.50 U	
25	A-5	Groundwater	VOA	60-29-7	Diethyl ether	ug/l	10 U	10 U	10 U																	
25	A-5	Groundwater	VOA	97-63-2	Ethyl methacrylate	ug/l	5 U	5 U	5 U																	
25	A-5	Groundwater	VOA	100-41-4	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	75-21-8	Ethylene oxide	ug/l	250 U	25 U	25 U																	
25	A-5	Groundwater	VOA	87-68-3	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U	4 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	67-72-1	Hexachloroethane	ug/l	10 U	10 U	10 U																	
25	A-5	Groundwater	VOA	74-88-4	Iodomethane	ug/l	5 U	5 U	5 U							5 U	5 U									
25	A-5	Groundwater	VOA	78-83-1	Isobutyl alcohol	ug/l	100 U	100 U	100 U																	
25	A-5	Groundwater	VOA	98-82-8	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	-64	LPAH (total)	ug/l	1 U	1 U	1 U																	
25	A-5	Groundwater	VOA	-81	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	2 U	2 U	2.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	109-77-3	Malononitrile	ug/l	1000000 U																			
25	A-5	Groundwater	VOA	126-98-7	Methacrylonitrile	ug/l	5 U	5 U	5 U																	
25	A-5	Groundwater	VOA	80-62-6	Methyl methacrylate	ug/l	5 U	5 U	5 U																	
25	A-5	Groundwater	VOA	1634-04-4	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	75-09-2	Methylene chloride	ug/l	1 U	1 U	1 U	0.86 J	2 U		2 U	1 U	5 U	5 U	1.6 U	5 U	2 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	A-5	Groundwater	VOA	91-20-3	Naphthalene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	104-51-8	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U	5 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	-150	NCPAH (total)	ug/l	1 U	1 U	1 U																	
25	A-5	Groundwater	VOA	98-95-3	Nitrobenzene	ug/l	**100 U**	**25 U**	**25 U**																	
25	A-5	Groundwater	VOA	103-65-1	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	95-47-6	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	107-19-7	Propargyl alcohol	ug/l	1000 U	1000 U	1000 U																	
25	A-5	Groundwater	VOA	135-98-8	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	100-42-5	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	98-06-6	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	A-5	Groundwater	VOA	127-18-4	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	108-88-3	Toluene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.12 J		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	156-60-5	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	10061-02-6	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	110-57-6	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U	5 U							10 U	10 U									
25	A-5	Groundwater	VOA	79-01-6	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	75-69-4	Trichlorofluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	A-5	Groundwater	VOA	108-05-4	Vinyl acetate	ug/l	10 U	5 U	5 U							5 U	5 U									
25	A-5	Groundwater	VOA	75-01-4	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	2 U	2 U	2 UJ	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	A-5	Groundwater	VOA	1330-20-7	Xylenes	ug/l					1 U		1 U		2 U											
25	A-5	Groundwater	VOA	-72	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U	1 U															
25	B-1	Groundwater	DIN	7429-90-5	Aluminum	ug/l											827		898	747	907	968	947	977	944	940
25	B-1	Groundwater	DIN	7440-36-0	Antimony	ug/l											0.305	1 U	1 U	0.056 U	0.09 U	0.090 U	0.090 U	0.05 U	0.05 U	0.05 U
25	B-1	Groundwater	DIN	7440-38-2	Arsenic	ug/l											0.15 U	1 UJ	1 U	0.10 U	0.56	0.41 J	0.5 U	0.50 U	0.08 J	0.14 J
25	B-1	Groundwater	DIN	7440-39-3	Barium	ug/l											16									
25	B-1	Groundwater	DIN	7440-41-7	Beryllium	ug/l											0.15 U	1 U	1 U	0.071 J	0.067 J	0.056	0.056	0.070	0.056	0.057
25	B-1	Groundwater	DIN	7440-43-9	Cadmium	ug/l											0.2 U	1 U	0.1 U	0.70 J	0.101	0.110	0.122	0.120	0.106	0.116
25	B-1	Groundwater	DIN	7440-70-2	Calcium	ug/l											11000									
25	B-1	Groundwater	DIN	7440-47-3	Chromium	ug/l											1.74	1 U	1 U	1.0 U	0.34 J	0.20 U	0.06 J	0.20 U	0.30	0.20 U

Table C-2-G
Summary of Chemicals in Groundwater at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																			
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	B-1	Groundwater	DIN	7440-48-4	Cobalt	ug/l											14.4									
25	B-1	Groundwater	DIN	7440-50-8	Copper	ug/l											30.2	33.1	31.1	32.3	33.8	26.5 J	31.4	33.1	29.3	27.0
25	B-1	Groundwater	DIN	7439-89-6	Iron	ug/l											1900									
25	B-1	Groundwater	DIN	7439-92-1	Lead	ug/l											0.133	1 U	1 U	0.075 U	0.030 U	0.030 U	0.030 U	0.030 U	0.022 J	0.012 J
25	B-1	Groundwater	DIN	7439-95-4	Magnesium	ug/l											2400									
25	B-1	Groundwater	DIN	7439-96-5	Manganese	ug/l											274									
25	B-1	Groundwater	DIN	7439-97-6	Mercury	ug/l											0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
25	B-1	Groundwater	DIN	7440-02-0	Nickel	ug/l											4.7	5.52	4.11	4.8	4.39	3.38	4.12	4.44	4.64	3.71
25	B-1	Groundwater	DIN	7440-09-7	Potassium	ug/l											2300									
25	B-1	Groundwater	DIN	7782-49-2	Selenium	ug/l											0.5 U	0.94 UJ	2 U	2.0 U	1.0 J	1.2 U	1.2 U	1.5 U	0.4 J	0.3 J
25	B-1	Groundwater	DIN	7440-22-4	Silver	ug/l											0.1 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.030 U	0.006 J	0.030 U
25	B-1	Groundwater	DIN	7440-23-5	Sodium	ug/l											12000									
25	B-1	Groundwater	DIN	7440-28-0	Thallium	ug/l											0.093	0.07 UJ	1 U	0.051 J	0.048	0.068	0.054	0.064	0.054	0.054
25	B-1	Groundwater	DIN	7440-62-2	Vanadium	ug/l											5 U									
25	B-1	Groundwater	DIN	7440-66-6	Zinc	ug/l											20.2	20.1	16.8	20.2 J	18.7	16.7	17.1	18.5 J	17.0	16.66
25	B-1	Groundwater	TIN	7429-90-5	Aluminum	ug/l					1220	821	749	730	801	841	975		836	761	1140	971	968	976	970	999
25	B-1	Groundwater	TIN	7440-36-0	Antimony	ug/l					0.044 U	0.2 U	0.087 U	1.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.056 U	0.04 J	0.090 U	0.090 U	0.05 U	0.05 U	0.05 U
25	B-1	Groundwater	TIN	7440-38-2	Arsenic	ug/l	1.4 J	5.7 J	1 U	1 U	2 U	2 U	0.63 J	2.9 U	5 U	1 U	1 U	1 U	0.576 J	0.10 U	0.57	0.40 J	0.1 J	0.50 U	0.09 J	0.17 J
25	B-1	Groundwater	TIN	7440-39-3	Barium	ug/l	19.2 J	259	16.5 J	15.1 J	15.9 J	14	15.4 J	14.8 J	16.5	15.9	16.7									
25	B-1	Groundwater	TIN	7440-41-7	Beryllium	ug/l					0.35 J	0.2 U	0.28 U	0.6 U	1 U	0.5 U	0.5 U	1 U	1 U	0.056 J	0.060 J	0.063	0.056	0.069	0.054	0.055
25	B-1	Groundwater	TIN	7440-43-9	Cadmium	ug/l	1 U	2.7 J	5 U	2 U	0.057 UJ	1.3	0.34 J	0.3 U	2 U	0.2 U	0.2 U	1 U	0.08 J	0.11	0.118 J	0.117	0.131	0.112	0.103	0.130
25	B-1	Groundwater	TIN	7440-70-2	Calcium	ug/l	13400	22000	11300	10700	11500	11300	11000	11300	12300	11300										
25	B-1	Groundwater	TIN	7440-47-3	Chromium	ug/l	4 U	63.2	6 U	9 U	4 UJ	5 U	0.6 U	0.4 U	6.46	0.1 U	0.122	1.13	1 U	1.0 U	0.29 J	0.20 U	0.08 J	0.20 U	0.14 J	0.20 U
25	B-1	Groundwater	TIN	7440-48-4	Cobalt	ug/l					9.3 J	11	8.9	7.9 J	8.57	9.12	8.49									
25	B-1	Groundwater	TIN	7440-50-8	Copper	ug/l	37.7	815	30.5	32.3	31	25	30.8	27.5	31.3	32.2	29.7	33.3	31.9	32.4	33.3	27.6 J	31.8	33.3	30.0	28.1 J
25	B-1	Groundwater	TIN	7439-89-6	Iron	ug/l	2140	107000	1430	1330	2280	1340	1230	1340	1380	1320										
25	B-1	Groundwater	TIN	7439-92-1	Lead	ug/l	1 U	22.8	1 U	1 U	2 U	0.2 U	0.036 U	1.6 U	2 U	0.15 U	0.15 U	1 U	1 U	0.075 U	0.035	0.033 U	0.030 U	0.030 U	0.014 J	0.024 J
25	B-1	Groundwater	TIN	7439-95-4	Magnesium	ug/l	3240	45400	2630 J	2510 J	2700	2670	2570	2620 J	2810	2750										
25	B-1	Groundwater	TIN	7439-96-5	Manganese	ug/l	246	1240	218	218	207	194	199	195	193	204	206									
25	B-1	Groundwater	TIN	7439-97-6	Mercury	ug/l	0.2 U	0.2 U	0.2 U	0.2 U	0.14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.0180 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
25	B-1	Groundwater	TIN	7440-02-0	Nickel	ug/l					4.6 J	20 U	4.8 J	4.6 J	4.65	4.76	4.28	4.52	4.16	4.8	4.35	3.54	4.24	4.74	3.83	3.87
25	B-1	Groundwater	TIN	7440-09-7	Potassium	ug/l	2310 J	10900	2160 J	2070 J	2020	2000 U	1840	1710 J	1930	2050										
25	B-1	Groundwater	TIN	7782-49-2	Selenium	ug/l	1 U	5 U	5 U	1 U	0.48 U	2	1.5 J	1.3 J	5 U	0.5 U	0.5 U	1 U	2 U	0.33 UJ	1.3 J	1.2 U	1.2 U	1.5 U	0.4 J	0.6 J
25	B-1	Groundwater	TIN	7440-22-4	Silver	ug/l	3 U	3 U	3 U	3 U	4 U	0.2 U	0.5 U	0.7 U	2 U	0.35 U	0.35 U	1 U	1 U	0.085 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
25	B-1	Groundwater	TIN	7440-23-5	Sodium	ug/l	14000	15300	11900	12000	11900	11800	11700	8890 J		12400										
25	B-1	Groundwater	TIN	7440-28-0	Thallium	ug/l					10 U	0.2 U	0.21 J	3.5 U	2 U	0.25 U	0.25 U	1 U	1 U	0.052 J	0.056	0.073	0.059	0.058	0.055	0.062
25	B-1	Groundwater	TIN	7440-62-2	Vanadium	ug/l					3 U	10 U	0.4 J	0.3 U	20 U	1 U	1 U									
25	B-1	Groundwater	TIN	7440-66-6	Zinc	ug/l	24.3	217	26.7	25.5	44.5 U	18	18.1	18 J	25 U	31.1	19.8	19.9	19.5	18.5 J	17.9	16.6	17.2	19.0 J	16.8	17.37
25	B-1	Groundwater	VOA	630-20-6	1,1,1,2-Tetrachloroethane	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	71-55-6	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	79-34-5	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	79-00-5	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	76-13-1	1,1,2-Trichlorotrifluoroethane	ug/l										2 U	2 U									
25	B-1	Groundwater	VOA	75-34-3	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	75-35-4	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	563-58-6	1,1-Dichloropropene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	87-61-6	1,2,3-Trichlorobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 UJ	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	96-18-4	1,2,3-Trichloropropane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	120-82-1	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U				1 U		2 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	B-1	Groundwater	VOA	95-63-6	1,2,4-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	96-12-8	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	1 U		1 U		1 U		2.5 U	10 U	10 U	5 U	5 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	B-1	Groundwater	VOA	106-93-4	1,2-Dibromoethane	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	B-1	Groundwater	VOA	95-50-1	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	107-06-2	1,2-Dichloroethane	ug/l	0.72 J	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	540-59-0	1,2-Dichloroethene	ug/l						0.5 U														
25	B-1	Groundwater	VOA	78-87-5	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	108-67-8	1,3,5-Trimethylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	96-23-1	1,3-Dichloro-2-propanol	ug/l	50 U	100 U	100 U																	
25	B-1	Groundwater	VOA	541-73-1	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.32 J		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	142-28-9	1,3-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	542-75-6	1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U														
25	B-1	Groundwater	VOA	1476-11-5	1,4-Dichloro-2-butene(cis)	ug/l	50 U	5 U	5 U																	
25	B-1	Groundwater	VOA	106-46-7	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U		1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	123-91-1	1,4-Dioxane	ug/l	250 U	250 U	250 U																	

Table C-2-G
Summary of Chemicals in Groundwater at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																		
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	B-1	Groundwater	VOA	590-20-7	2,2-Dichloropropane	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	78-93-3	2-Butanone	ug/l	30	5 U	5 U	5 U		20 U	5 U	5 U	50 U	50 U	50 U	10 U	10 U	5.0 U	20 UR				20 U	
25	B-1	Groundwater	VOA	110-75-8	2-Chloroethyl vinyl ether	ug/l	65	10 U	10 U						10 U	10 U	10 U									
25	B-1	Groundwater	VOA	95-49-8	2-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	591-78-6	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	10 U	10 U	5.0 UJ	20 UR				20 U	
25	B-1	Groundwater	VOA	79-46-9	2-Nitropropane	ug/l	10 U	10 U	10 U																	
25	B-1	Groundwater	VOA	16136-84-8	3-chloropropene	ug/l	5 U	5 U	5 U																	
25	B-1	Groundwater	VOA	106-43-4	4-Chlorotoluene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	99-87-6	4-Isopropyltoluene	ug/l									1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	108-10-1	4-Methyl-2-pentanone	ug/l	33	5 U	5 U	5 U	5 U	20 U	5 U	5 U	10 U	20 U	20 U	5 U	5 U	5.0 U	20 UR				20 U	
25	B-1	Groundwater	VOA	67-64-1	Acetone	ug/l	160	5 U	5 U	5 U		20 U	5 U	5 U		50 U	50 U	25 U	25 U	5.0 U	20 UR		20 U		20 U	20 U
25	B-1	Groundwater	VOA	75-05-8	Acetonitrile	ug/l	5 U	5 U	5 U																	
25	B-1	Groundwater	VOA	107-02-8	Acrolein	ug/l	100 U	25 U	25 U																	
25	B-1	Groundwater	VOA	107-13-1	Acrylonitrile	ug/l	50 U	10 U	10 U							10 U	10 U									
25	B-1	Groundwater	VOA	71-43-2	Benzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	100-44-7	Benzyl chloride	ug/l	5 U	5 U	5 U																	
25	B-1	Groundwater	VOA	598-31-2	Bromoacetone	ug/l	2000 U	2000 U	2000 U																	
25	B-1	Groundwater	VOA	108-86-1	Bromobenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	74-97-5	Bromochloromethane	ug/l					1 U		1 U		1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	75-27-4	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	75-25-2	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	74-83-9	Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	5 U	5 U	5 U	5 U	1.0 U	0.50 UJ				0.50 U	
25	B-1	Groundwater	VOA	-71	BTEX (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U														
25	B-1	Groundwater	VOA	75-15-0	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	1 UJ	0.5 U	1 U	1 U	10 U	2 U	2 U	10 U	10 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	56-23-5	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	108-90-7	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	75-00-3	Chloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	67-66-3	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	74-87-3	Chloromethane	ug/l	37	1 U	24	1 U	1 U	0.5 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	126-99-8	Chloroprene	ug/l	50 U	10 U	10 U																	
25	B-1	Groundwater	VOA	156-59-2	cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	10061-01-5	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	124-48-1	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	74-95-3	Dibromomethane	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	75-71-8	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	5 U	5 U	5 U	5 U	1.0 UJ	0.50 UJ				0.50 U	
25	B-1	Groundwater	VOA	60-29-7	Diethyl ether	ug/l	10 U	10 U	10 U																	
25	B-1	Groundwater	VOA	97-63-2	Ethyl methacrylate	ug/l	5 U	5 U	5 U																	
25	B-1	Groundwater	VOA	100-41-4	Ethylbenzene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	75-21-8	Ethylene oxide	ug/l	250 U	25 U	25 U																	
25	B-1	Groundwater	VOA	87-68-3	Hexachlorobutadiene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	4 U	4 U	1.0 UJ	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	67-72-1	Hexachloroethane	ug/l	10 U	10 U	10 U																	
25	B-1	Groundwater	VOA	74-88-4	Iodomethane	ug/l	5 U	5 U	5 U							5 U	5 U									
25	B-1	Groundwater	VOA	78-83-1	Isobutyl alcohol	ug/l	94 J	100 U	100 U																	
25	B-1	Groundwater	VOA	98-82-8	Isopropylbenzene	ug/l	1 U	1 U	1 U						1 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	-64	LPAH (total)	ug/l	1 U	1 U	1 U																	
25	B-1	Groundwater	VOA	-81	m,p-Xylene	ug/l	1 U	1 U	1 U	1 U				0.6 J		2 U	2 U	2 U	2 U	2.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	109-77-3	Malononitrile	ug/l	1000000 U																			
25	B-1	Groundwater	VOA	126-98-7	Methacrylonitrile	ug/l	5 U	5 U	5 U																	
25	B-1	Groundwater	VOA	80-62-6	Methyl methacrylate	ug/l	5 U	5 U	5 U																	
25	B-1	Groundwater	VOA	1634-04-4	Methyl Tert-Butyl Ether	ug/l										2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	75-09-2	Methylene chloride	ug/l	1 U	1 U	1 U	1.4	2 U	1 U	2 U	1 U	5 U	5 U	1.2 J	5 U	2 U	1.0 U	2.0 U		2.0 U		2.0 U	2.0 U
25	B-1	Groundwater	VOA	91-20-3	Naphthalene	ug/l	1 U	1 U	1 U						2 U	2 U	2 U	2 U	2 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	104-51-8	n-Butylbenzene	ug/l									1 U	2 U	2 U	5 U	5 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	-150	NCPAH (total)	ug/l	1 U	1 U	1 U																	
25	B-1	Groundwater	VOA	98-95-3	Nitrobenzene	ug/l	**100 U**	**25 U**	**25 U**																	
25	B-1	Groundwater	VOA	103-65-1	n-Propylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	95-47-6	o-Xylene	ug/l	1 U	1 U	1 U	1 U				1 U		2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	107-19-7	Propargyl alcohol	ug/l	1000 U	1000 U	1000 U																	
25	B-1	Groundwater	VOA	135-98-8	sec-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	100-42-5	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 UJ	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	98-06-6	tert-Butylbenzene	ug/l									1 U	2 U	2 U	1 U	1 U	1.0 U	2.0 U				2.0 U	
25	B-1	Groundwater	VOA	127-18-4	Tetrachloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	108-88-3	Toluene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.20 J		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	156-60-5	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U

Table C-2-G
Summary of Chemicals in Groundwater at Roberts Landfill

SWMU	Location Cross Reference	Matrix	Method Class	CAS ID	Analyte	Units	Concentration																			
							3/1996	6/1996	9/1996	10/1996	12/1997	6/1998	9/1999	11/2000	10/2001	10/2002	10/2003	9/2004	9/2005	9/2006	9/2007	9/2008	9/2009	9/2010	9/2011	9/2013
25	B-1	Groundwater	VOA	10061-02-6	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U				0.50 U	
25	B-1	Groundwater	VOA	110-57-6	trans-1,4-Dichloro-2-butene	ug/l	5 U	5 U	5 U							10 U	10 U									
25	B-1	Groundwater	VOA	79-01-6	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	75-69-4	Trichlorofluoromethane	ug/l	1 U	1 U	1 U					1 U	1 U	2 U	2.7	2.28	2.33	2.7	1.5				0.87	
25	B-1	Groundwater	VOA	108-05-4	Vinyl acetate	ug/l	10 U	5 U	5 U							5 U	5 U									
25	B-1	Groundwater	VOA	75-01-4	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	2 U	2 U	2 UJ	1 U	1 U	1.0 U	0.50 U		0.50 U		0.50 U	0.50 U
25	B-1	Groundwater	VOA	1330-20-7	Xylenes	ug/l					1 U	0.5 U	1 U		2 U											
25	B-1	Groundwater	VOA	-72	Xylenes (total)	ug/l	1 U	1 U	1 U	1 U	1 U	0.5 U														

Notes:

Blank cells in the concentration columns indicate that a sample was not collected from that location or the sample was not analyzed for that chemical.
J - estimated value
U - not detected, value shown is the quantitation limit
UJ - Estimated quantitation limit
ug/l - microgram/liter

APPENDIX D-1

SUMMARY OF 2013 DEPTH-TO-WATER MEASUREMENTS

	Location Cross-Reference	Date	Sample Collected	Casing Elevation (feet MLLW)	Depth to Water (feet)	Product Thickness (feet)	Type of Product	Corrected Depth to Water* (feet)	GW Surface Elevation (feet MLLW)	Comments
Area 303	03-107	8/27/13	Y	31.30	27.61	0	NA	27.61	3.69	
	03-012	8/28/13	Y	9.27	7.41	0	NA	7.41	1.86	
	04-211	8/28/13	Y	28.45	24.08	0	NA	24.08	4.37	Also monitored as part of GCI Compound.
	MW-303-28	8/27/13	N	32.83	28.54	0.07	GRO	28.49	4.34	No sample collected due to product thickness.
	MW-303-30	8/28/13	Y	31.20	27.59	0.01	GRO	27.58	3.62	
	MW-303-31	8/28/13	Y	31.82	27.70	0	NA	27.70	4.12	
	MW-303-32	8/28/13	Y	29.16	24.54	0	NA	24.54	4.62	
	MW-303-33	8/27/13	Y	27.18	22.92	0	NA	22.92	4.26	
	MW-303-37	8/28/13	Y	16.23	13.07	0	NA	13.07	3.16	
	MW-303-38	8/28/13	Y	27.68	25.40	0	NA	25.40	2.28	
	MW-303-39	8/28/13	Y	23.43	21.41	0	NA	21.41	2.02	
	MW-303-40	8/28/13	Y	17.68	6.96	0	NA	6.96	10.72	
	MW-303-41	8/28/13	N	30.73	Dry	0	NA	NA	NA	Well dry, no sample collected.
	MW-303-42	8/28/13	Y	30.73	28.95	0.01	GRO	28.94	1.78	
	MW-303-43	8/28/13	Y	32.50	29.01	0	NA	29.01	3.49	
	MW-303-44	8/28/13	Y	32.91	29.54	0	NA	29.54	3.37	
	MRP-MW2	8/28/13	Y	26.99	21.69	0	NA	21.69	5.30	Also sampled as part of SWMU 62, New Housing Fuel Leak Area
Former Power Plant, Building T-1451	01-118	8/26/13	Y	19.68	16.55	0	NA	16.55	3.13	
	01-150	8/26/13	Y	22.68	19.84	0	NA	19.84	2.84	
	MW-1451-1	8/26/13	Y	6.56	6.51	0	NA	6.51	0.05	
	MW-1451-2	8/26/13	Y	6.24	6.06	0	NA	6.06	0.18	
	MW-1451-3	8/27/13	Y	5.09	5.27	0	NA	5.27	-0.18	
	MW-1451-4	8/26/13	Y	5.99	6.00	0	NA	6.00	-0.01	
	MW-1451-5	8/26/13	Y	7.50	6.81	0	NA	6.81	0.69	
	MW-1451-6	8/27/13	Y	6.15	5.29	0	NA	5.29	0.86	
	MW-1451-7	8/26/13	N	7.33	6.96	0.50	DRO	6.55	0.78	No sample collected due to product thickness.
	MW-1451-8	8/26/13	Y	8.07	6.97	0	NA	6.97	1.10	
	MW-1451-9	8/28/13	N	9.91	8.77	0.02	DRO	8.75	1.15	No sample collected due to product thickness.
	E-701	8/26/13	Y	21.26	18.43	0	NA	18.43	2.83	Background well.
GCI Compound, UST GC-1	04-100	8/30/13	Y	32.80	28.38	0	NA	28.38	4.42	
	04-201	8/30/13	N	30.61	25.94	0	NA	25.94	4.67	
	04-202	8/30/13	Y	30.90	26.28	0	NA	26.28	4.62	
	04-203	8/30/13	N	31.13	26.59	0	NA	26.59	4.54	
	04-204	8/30/13	Y	30.82	26.02	0.01	GRO	26.01	4.81	
	04-210	8/30/13	Y	29.22	24.96	0	NA	24.96	4.26	
	04-211	8/28/13	Y	28.45	24.08	0	NA	24.08	4.37	
	04-213	8/30/13	Y	28.70	24.06	0	NA	24.06	4.64	
	04-701	8/30/13	Y	18.19	14.31	0	NA	14.31	3.88	

	Location Cross-Reference	Date	Sample Collected	Casing Elevation (feet MLLW)	Depth to Water (feet)	Product Thickness (feet)	Type of Product	Corrected Depth to Water* (feet)	GW Surface Elevation (feet MLLW)	Comments
Housing Area (Arctic Acres)	03-416	8/30/13	Y	26.40	19.96	0	NA	19.96	6.44	
	03-420	8/30/13	Y	29.76	23.06	0	NA	23.06	6.70	
	03-421	8/30/13	Y	29.81	23.05	0	NA	23.05	6.76	
	03-890	8/30/13	Y	30.54	23.90	0	NA	23.90	6.64	
NMCB	02-300	8/31/13	N	11.99	10.27	0.44	GRO	9.95	2.04	
	02-301	8/31/13	N	14.87	12.36	0	NA	12.36	2.51	
	02-451	8/31/13	Y	10.99	8.51	0	NA	8.51	2.48	
	02-452	8/31/13	N	11.94	9.32	0	NA	9.32	2.62	
	02-453	8/31/13	N	11.68	9.19	0	NA	9.19	2.49	
	02-455	8/31/13	N	14.08	11.53	0	NA	11.53	2.55	
	02-461	8/31/13	Y	9.41	6.74	0	NA	6.74	2.67	
	02-463	8/31/13	N	12.58	9.71	0	NA	9.71	2.87	
	02-478	8/31/13	N	10.24	7.83	0	NA	7.83	2.41	
	02-479	8/31/13	Y	16.25	12.78	0	NA	12.78	3.47	
	02-497	8/31/13	N	9.15	6.69	0	NA	6.69	2.46	
	02-815	8/31/13	N	16.35	13.90	0	NA	13.90	2.45	
	02-816	8/31/13	N	12.86	10.60	0	NA	10.60	2.26	
	02-817	8/31/13	N	12.49	9.95	0	NA	9.95	2.54	
	02-818	8/31/13	Y	11.55	8.98	0	NA	8.98	2.57	
	02-819	8/31/13	N	10.03	7.33	0	NA	7.33	2.70	
	E-201	8/31/13	Y	15.54	13.22	0	NA	13.22	2.32	
	NMCB-04	8/31/13	N	14.49	12.25	0.43	GRO	11.93	2.56	
	NMCB-07	8/31/13	N	11.85	9.58	0.36	GRO	9.31	2.54	No sample collected due to product thickness.
	NMCB-08	8/31/13	N	8.52	5.98	0	NA	5.98	2.54	
	NMCB-09	8/31/13	Y	11.96	9.67	0	NA	9.67	2.29	
	NMCB-10	8/31/13	N	12.95	10.56	0.14	GRO	10.46	2.49	No sample collected due to product thickness.
	NMCB-11	8/31/13	N	12.05	9.26	0.03	GRO	9.24	2.81	No sample collected due to product thickness.
	NMCB-12	8/31/13	N	16.27	14.18	0	NA	14.18	2.09	
ROICC	08-200	9/4/13	Y	14.87	4.05	0	NA	4.05	10.82	
	08-202	9/4/13	Y	13.86	2.70	0	NA	2.70	11.16	
Runway 5-23	14-100	9/7/13	Y	15.06	2.75	0	NA	2.75	12.31	
SA 79, Main Road Pipeline, South End	02-230	9/5/13	Y	13.69	11.44	0	NA	11.44	2.25	
	601	9/5/13	Y	13.77	11.03	0	NA	11.03	2.74	
	MRP-MW8	9/5/13	Y	12.72	10.11	0	NA	10.11	2.61	

	Location Cross-Reference	Date	Sample Collected	Casing Elevation (feet MLLW)	Depth to Water (feet)	Product Thickness (feet)	Type of Product	Corrected Depth to Water* (feet)	GW Surface Elevation (feet MLLW)	Comments
SA 80, Steam Plant 4 (UST 27089 and 27090)	04-155	9/4/13	N	27.77	16.01	0.21	DRO	15.84	11.93	
	04-157	9/4/13	N	28.18	19.51	0.01	DRO	19.50	8.68	
	04-158	9/4/13	Y	27.36	19.71	0	NA	19.71	7.65	
	04-159	9/4/13	Y	29.86	23.55	0	NA	23.55	6.31	
	04-164	9/4/13	N	28.51	22.22	0	NA	22.22	6.29	
	04-173	9/4/13	Y	27.46	14.78	0	NA	14.78	12.68	
	SP4-3	9/4/13	Y	26.70	20.40	0	NA	20.40	6.30	
South of Runway 18-36	02-231	8/30/13	Y	16.59	14.32	0	NA	14.32	2.27	
	02-232	8/30/13	Y	18.54	16.55	0	NA	16.55	1.99	
	18/36-02	8/30/13	N	19.86	17.50	0	NA	17.50	2.36	
	AS-1	8/30/13	Y	12.10	13.66	0	NA	13.66	-1.56	
	E-213 (AMW-213)	8/30/13	N	13.73	10.91	0.01	DRO	10.90	2.83	
	E-216	8/30/13	N	18.45	16.12	0.14	DRO	16.01	2.44	
	E-217 (AMW-217)	8/30/13	N	18.12	15.63	0.04	DRO	15.60	2.52	
	RW-18/36-03	8/30/13	N	16.25	13.59	0	NA	13.59	2.66	
	RW-18/36-04	8/30/13	N	16.29	13.59	0.14	DRO	13.48	2.81	
	RW-18/36-05	8/30/13	N	11.39	8.93	0	NA	8.93	2.46	
	Z 3-6	8/30/13	N	9.81	7.25	0	NA	7.25	2.56	
	Z 4-2	8/30/13	N	14.92	12.17	0	NA	12.17	2.75	
SWMU 14, Old Pesticide Storage and Disposal Area	MW-14-5	9/10/13	Y	21.94	16.02	0	NA	16.02	5.92	
	01-153	9/10/13	Y	24.29	18.54	0	NA	18.54	5.75	
	MW-15-424	9/10/13	N	21.94	18.19	0	NA	18.19	3.75	
	MW15-3	9/10/13	N	18.90	13.54	0	NA	13.54	5.36	
SWMU 17, Power Plant No. 3 Area	05-735	9/6/13	Y	19.00	15.84	0	NA	15.84	3.16	
SWMU 25, Roberts Landfill	A-2	9/9/13	Y	225.72	6.46	0	NA	6.46	219.26	
	A-3	9/10/13	Y	140.38	23.49	0	NA	23.49	116.89	
	A-5	9/9/13	Y	214.45	25.57	0	NA	25.57	188.88	
	B-1	9/9/13	Y	216.74	11.35	0	NA	11.35	205.39	
SWMU 55, Public Works Transportation Department Waste Storage Area	55-145	9/11/13	Y	21.40	16.95	0	NA	16.95	4.45	
	55-146	9/11/13	N	21.25	17.64	0	NA	17.64	3.61	
SWMU 60, Tank Farm A	650	8/30/13	Y	13.11	10.00	0	NA	10.00	3.11	
	651	8/30/13	Y	12.08	9.10	0	NA	9.10	2.98	
	652	8/30/13	N	12.37	9.55	0.03	DRO	9.53	2.84	No sample collected due to product thickness.
	653	8/30/13	N	15.10	11.79	0.05	DRO	11.75	3.35	No sample collected due to product thickness.
	LC5A	8/30/13	Y	10.86	6.95	0	NA	6.95	3.91	
	MW E006	8/30/13	Y	156.42	6.38	0	NA	6.38	150.04	
SWMU 61, Tank Farm B	14-113	9/6/13	Y	9.14	9.09	0	NA	9.09	0.05	
	14-210	9/6/13	Y	12.12	11.67	0	NA	11.67	0.45	
	TFB-MW4B	9/6/13	Y	37.44	4.47	0	NA	4.47	32.97	

	Location Cross-Reference	Date	Sample Collected	Casing Elevation (feet MLLW)	Depth to Water (feet)	Product Thickness (feet)	Type of Product	Corrected Depth to Water* (feet)	GW Surface Elevation (feet MLLW)	Comments
SWMU 62, New Housing Fuel Leak Sandy Cove	03-104	9/10/13	Y	25.13	19.80	0	NA	19.80	5.33	
	03-155	9/10/13	Y	26.27	19.31	0	NA	19.31	6.96	
	03-619	9/10/13	Y	23.38	16.65	0	NA	16.65	6.73	
	03-778	9/10/13	Y	25.30	19.85	0	NA	19.85	5.45	
	HMW-146-1	9/10/13	N	23.52	17.04	0	NA	17.04	6.48	
	MRP-MW2	8/28/13	Y	26.99	21.69	0	NA	21.69	5.30	
	MRP-MW3	9/10/13	Y	27.25	8.29	0	NA	8.29	18.96	
	MW-107-1	9/10/13	Y	25.65	18.60	0	NA	18.60	7.05	
	MW-134-10	9/10/13	N	23.94	17.18	0	NA	17.18	6.76	
	MW-134-11	9/10/13	Y	26.53	18.49	0	NA	18.49	8.04	
	MW-146-1	9/10/13	Y	24.42	17.52	0	NA	17.52	6.90	
	MW-187-1	9/10/13	Y	26.86	19.42	0	NA	19.42	7.44	
	RW-102-4	9/10/13	N	25.28	19.51	0	NA	19.51	5.77	
SWMU 62, New Housing Fuel Leak Eagle Bay Housing	03-101	9/7/13	N	26.01	22.43	0	NA	22.43	3.58	
	03-102	9/7/13	N	17.27	13.99	0	NA	13.99	3.28	
	03-103	9/7/13	N	18.93	15.78	0	NA	15.78	3.15	
	03-109	9/7/13	N	33.69	30.03	0	NA	30.03	3.66	
	03-502	9/7/13	Y	28.04	24.40	0	NA	24.40	3.64	
	03-898	9/7/13	N	14.83	12.46	0	NA	12.46	2.37	
	AMW-704	9/7/13	Y	8.21	6.51	0	NA	6.51	1.70	
	CTO-124-MW15	9/7/13	N	20.96	17.60	0	NA	17.60	3.36	
	HMW-303-3	9/7/13	N	31.64	27.82	0	NA	27.82	3.82	
	HMW-303-4	9/7/13	N	30.20	26.17	0	NA	26.17	4.03	
	HMW-303-11	9/7/13	N	30.35	26.60	0	NA	26.60	3.75	
	MW-303-7	9/7/13	Y	26.07	21.80	0	NA	21.80	4.27	
	MW-303-8	9/7/13	N	27.20	23.00	0.08	DRO	22.93	4.27	
	MW-303-12	9/7/13	N	25.64	21.54	0	NA	21.54	4.10	
	RW-303-4	9/7/13	N	26.31	22.28	0.03	DRO	22.26	4.05	
	RW-303-13	9/7/13	Y	8.98	6.44	0	NA	6.44	2.54	
	RW-303-14	9/7/13	N	10.53	7.73	0	NA	7.73	2.80	
	RW-303-15	9/7/13	N	31.26	27.55	0	NA	27.55	3.71	
	RW-303-16	9/7/13	Y	11.02	7.79	0	NA	7.79	3.23	
Tanker Shed, UST 42494	04-175	9/3/13	Y	11.34	6.85	0	NA	6.85	4.49	
	04-290	9/3/13	Y	11.19	7.22	0	NA	7.22	3.97	
	04-301	9/3/13	N	11.35	6.94	0	NA	6.94	4.41	
	04-302	9/3/13	N	11.13	6.70	0	NA	6.70	4.43	
	04-306	9/3/13	Y	11.17	7.21	0	NA	7.21	3.96	
	04-312	9/3/13	N	11.21	6.81	0	NA	6.81	4.40	
	04-313	9/3/13	N	11.35	6.85	0	NA	6.85	4.50	
	04-601	9/3/13	Y	13.72	10.35	0	NA	10.35	3.37	
	TS-03	9/3/13	N	9.61	6.62	0	NA	6.62	2.99	

Notes:

*Water levels corrected for light non-aqueous phase liquid (LNAPL) layer if observed in well. Calculation is based on the density of the type of product present. The type of product selected for the correction was determined by the 2013 analytica results.

The product that was present in the highest quantities at each site or area within a site was selected. If gasoline and diesel were present in equal amounts, diesel was selected based on the assumption that the gasoline was probably weathered and denser than non-weathered gasoline.

APPENDIX D-2

HISTORICAL DEPTH-TO-WATER MEASUREMENTS

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Area 303	Area 303	03-107	03-107	MW	8/27/13	27.61	Product Not Found	0	3.69
Area 303	Area 303	03-312	03-312	MW	8/28/13	7.41	Product Not Found	0	1.86
Area 303	Area 303	04-211	04-211	MW	8/28/13	24.08	Product Not Found	0	4.37
Area 303	Area 303	MW-303-28	MW-303-28	MW	8/27/13	28.49	GRO	0.07	4.34
Area 303	Area 303	MW-303-30	MW-303-30	MW	8/28/13	27.58	GRO	0.01	3.62
Area 303	Area 303	MW-303-31	MW-303-31	MW	8/28/13	27.70	Product Not Found	0	4.12
Area 303	Area 303	MW-303-32	MW-303-32	MW	8/28/13	24.54	Product Not Found	0	4.62
Area 303	Area 303	MW-303-33	MW-303-33	MW	8/27/13	22.92	Product Not Found	0	3.64
Area 303	Area 303	MW-303-37	MW-303-37	MW	8/28/13	13.07	Product Not Found	0	3.16
Area 303	Area 303	MW-303-38	MW-303-38	MW	8/28/13	25.40	Product Not Found	0	2.28
Area 303	Area 303	MW-303-39	MW-303-39	MW	8/28/13	21.41	Product Not Found	0	2.02
Area 303	Area 303	MW-303-40	MW-303-40	MW	8/28/13	6.96	Product Not Found	0	10.72
Area 303	Area 303	MW-303-41	MW-303-41	MW	8/28/13	NA	Product Not Found	0	NA
Area 303	Area 303	MW-303-42	MW-303-42	MW	8/28/13	28.94	GRO	0.01	1.78
Area 303	Area 303	MW-303-43	MW-303-43	MW	8/28/13	29.01	Product Not Found	0	3.49
Area 303	Area 303	MW-303-44	MW-303-44	MW	8/28/13	29.54	Product Not Found	0	3.37
Area 303	Area 303	MRP-MW2	MRP-MW2	MW	8/28/13	21.69	Product Not Found	0	5.30
Former Power Plant, Building T-1451	T1451	118	01-118	MW	10/05/2001	16.40	Product Not Found	0	3.28
Former Power Plant, Building T-1451	T1451	118	01-118	MW	10/17/2002	16.03	Product Not Found	0	3.65
Former Power Plant, Building T-1451	T1451	118	01-118	MW	05/08/2003	15.62	Product Not Found	0	4.06
Former Power Plant, Building T-1451	T1451	118	01-118	MW	10/08/2003	16.10	Product Not Found	0	3.58
Former Power Plant, Building T-1451	T1451	118	01-118	MW	11/04/2003	16.72	Product Not Found	0	2.96
Former Power Plant, Building T-1451	T1451	118	01-118	MW	09/24/2004	16.71	Unknown Odor	0	2.97
Former Power Plant, Building T-1451	T1451	118	01-118	MW	9/16/2005	16.51		0	3.17
Former Power Plant, Building T-1451	T1451	118	01-118	MW	9/22/2006	16.92	Product Not Found	0	2.76
Former Power Plant, Building T-1451	T1451	118	01-118	MW	9/8/2007	16.44	Product Not Found	0	3.24
Former Power Plant, Building T-1451	T1451	118	01-118	MW	9/9/2008	16.63	Product Not Found	0	3.05
Former Power Plant, Building T-1451	T1451	118	01-118	MW	9/11/2009	16.50	DRO	0.01	3.18
Former Power Plant, Building T-1451	T1451	118	01-118	MW	9/1/2010	16.77	Product Not Found	0	2.91
Former Power Plant, Building T-1451	T1451	118	01-118	MW	9/3/2011	16.65	Product Not Found	0	3.03
Former Power Plant, Building T-1451	T1451	118	01-118	MW	9/1/2012	16.62	Product Not Found	0	3.06
Former Power Plant, Building T-1451	T1451	118	01-118	MW	8/26/2013	16.55	Product Not Found	0	3.13
Former Power Plant, Building T-1451	T1451	150	01-150	MW	06/05/2003	19.78	Product Not Found	0	2.90
Former Power Plant, Building T-1451	T1451	150	01-150	MW	10/08/2003	19.41	Product Not Found	0	3.27
Former Power Plant, Building T-1451	T1451	150	01-150	MW	11/04/2003	20.70	Product Not Found	0	1.98
Former Power Plant, Building T-1451	T1451	150	01-150	MW	09/24/2004	20.48	Unknown Odor	0	2.20
Former Power Plant, Building T-1451	T1451	150	01-150	MW	9/18/2005	20.33		0	2.35
Former Power Plant, Building T-1451	T1451	150	01-150	MW	9/22/2006	20.29	Product Not Found	0	2.39
Former Power Plant, Building T-1451	T1451	150	01-150	MW	9/8/2007	20.13	Product Not Found	0	2.55
Former Power Plant, Building T-1451	T1451	150	01-150	MW	9/9/2008	20.03	Product Not Found	0	2.65
Former Power Plant, Building T-1451	T1451	150	01-150	MW	9/11/2009	19.98	Product Not Found	0	2.70
Former Power Plant, Building T-1451	T1451	150	01-150	MW	9/1/2010	20.24	Product Not Found	0	2.44
Former Power Plant, Building T-1451	T1451	150	01-150	MW	9/3/2011	20.14	Product Not Found	0	2.54
Former Power Plant, Building T-1451	T1451	150	01-150	MW	9/1/2012	20.04	Product Not Found	0	2.64
Former Power Plant, Building T-1451	T1451	150	01-150	MW	8/26/2013	19.84	Product Not Found	0	2.84
Former Power Plant, Building T-1451	T1451	151	01-151	MW	06/05/2003	7.72	Product Not Found	0	0.95
Former Power Plant, Building T-1451	T1451	151	01-151	MW	10/08/2003	6.52	Product Not Found	0	2.15
Former Power Plant, Building T-1451	T1451	151	01-151	MW	11/04/2003	7.68	Product Not Found	0	0.99
Former Power Plant, Building T-1451	T1451	151	01-151	MW	09/24/2004	7.79	Unknown Odor	0	0.88
Former Power Plant, Building T-1451	T1451	151	01-151	MW	09/18/05	7.75		0	0.92

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Former Power Plant, Building T-1451	T1451	151	01-151	MW	9/22/2006	7.76	Product Not Found	0	0.91
Former Power Plant, Building T-1451	T1451	151	01-151	MW	9/8/2007	7.59	Product Not Found	0	1.08
Former Power Plant, Building T-1451	T1451	151	01-151	MW	9/9/2008	7.47	Product Not Found	0	1.20
Former Power Plant, Building T-1451	T1451	151	01-151	MW	9/11/2009	7.69	Product Not Found	0	0.98
Former Power Plant, Building T-1451	T1451	151	01-151	MW	9/1/2010	7.89	Product Not Found	0	0.78
Former Power Plant, Building T-1451	T1451	151	01-151	MW	9/3/2011	7.81	Product Not Found	0	0.86
Former Power Plant, Building T-1451	T1451	151	01-151	MW	9/1/2012	NA	NA	NA	NA
Former Power Plant, Building T-1451	TFA	148	E-701	MW	10/25/2002	18.03	Product Not Found	0	3.23
Former Power Plant, Building T-1451	TFA	148	E-701	MW	10/09/2003	17.95	Product Not Found	0	3.31
Former Power Plant, Building T-1451	TFA	148	E-701	MW	11/04/2003	18.60	Product Not Found	0	2.66
Former Power Plant, Building T-1451	TFA	148	E-701	MW	09/24/2004	18.70	Product Not Found	0	2.56
Former Power Plant, Building T-1451	TFA	148	E-701	MW	09/18/05	18.53		0	2.73
Former Power Plant, Building T-1451	TFA	148	E-701	MW	9/22/2006	18.84	Product Not Found	0	2.42
Former Power Plant, Building T-1451	TFA	148	E-701	MW	9/9/2007	18.35	Product Not Found	0	2.91
Former Power Plant, Building T-1451	TFA	148	E-701	MW	9/9/2008	18.57	Product Not Found	0	2.69
Former Power Plant, Building T-1451	TFA	148	E-701	MW	9/11/2009	18.51	Product Not Found	0	2.75
Former Power Plant, Building T-1451	TFA	148	E-701	MW	9/1/2010	18.80	Product Not Found	0	2.46
Former Power Plant, Building T-1450	TFA	148	E-701	MW	8/26/13	18.43	Product Not Found	0.00	2.83
Former Power Plant, Building T-1451	TFA		MW-1451-1	MW	8/26/13	6.51	Product Not Found	0	0.05
Former Power Plant, Building T-1451	TFA		MW-1451-2	MW	8/26/13	6.06	Product Not Found	0	0.18
Former Power Plant, Building T-1451	TFA		MW-1451-3	MW	8/27/13	5.27	Product Not Found	0	-0.18
Former Power Plant, Building T-1451	TFA		MW-1451-4	MW	8/26/13	6.00	Product Not Found	0	-0.01
Former Power Plant, Building T-1451	TFA		MW-1451-5	MW	8/26/13	6.81	Product Not Found	0	0.69
Former Power Plant, Building T-1451	TFA		MW-1451-6	MW	8/27/13	5.29	Product Not Found	0	0.86
Former Power Plant, Building T-1451	TFA		MW-1451-7	MW	8/26/13	6.55	DRO	0.5	0.78
Former Power Plant, Building T-1451	TFA		MW-1451-8	MW	8/26/13	6.97	Product Not Found	0	1.10
Former Power Plant, Building T-1451	TFA		MW-1451-9	MW	8/28/13	8.75	DRO	0.02	1.15
GCI Compound UST GC-1	GCI	100	04-100	MW	06/05/2003	27.55	Product Not Found	0	5.25
GCI Compound UST GC-1	GCI	100	04-100	MW	09/24/2004	28.65	Unknown Odor	0	4.15
GCI Compound UST GC-1	GCI	100	04-100	MW	9/20/2005	28.64		0	4.16
GCI Compound UST GC-1	E-RWAY	100	04-100	MW	9/20/2005	15.07		0	3.12
GCI Compound UST GC-1	E-RWAY	100	04-100	MW	9/16/2006	28.86		0	3.94
GCI Compound UST GC-1	E-RWAY	100	04-100	MW	9/20/2007	28.32	Product Not Found	0	4.48
GCI Compound UST GC-1	E-RWAY	100	04-100	MW	9/20/2008	28.54	Product Not Found	0	4.26
GCI Compound UST GC-1	E-RWAY	100	04-100	MW	9/10/2009	28.10	Product Not Found	0	4.70
GCI Compound UST GC-1	E-RWAY	100	04-100	MW	9/2/2010	28.40	Product Not Found	0	4.40
GCI Compound UST GC-1	E-RWAY	100	04-100	MW	8/30/2011	28.03	Product Not Found	0	4.77
GCI Compound UST GC-1	E-RWAY	100	04-100	MW	9/3/2012	28.11	Product Not Found	0	4.69
GCI Compound UST GC-1	E-RWAY	100	04-100	MW	8/30/13	28.38	Product Not Found	0	4.42
GCI Compound UST GC-1	E-RWAY	201	04-201	MW	07/31/2002	25.35			5.26
GCI Compound UST GC-1	E-RWAY	201	04-201	MW	9/20/2005	25.81		0	4.80
GCI Compound UST GC-1	E-RWAY	201	04-201	MW	9/21/2006	26.45	Product Not Found	0	4.16
GCI Compound UST GC-1	E-RWAY	201	04-201	MW	9/19/2007	24.41	Product Not Found	0	6.20
GCI Compound UST GC-1	E-RWAY	201	04-201	MW	9/20/2008	25.44	Product Not Found	0	5.17
GCI Compound UST GC-1	E-RWAY	201	04-201	MW	9/10/2009	24.74	Product Not Found	0	5.87
GCI Compound UST GC-1	E-RWAY	201	04-201	MW	9/2/2010	26.79	Product Not Found	0	3.82
GCI Compound UST GC-1	E-RWAY	201	04-201	MW	8/30/2011	25.45	Product Not Found	0	5.16
GCI Compound UST GC-1	E-RWAY	201	04-201	MW	9/3/2012	25.63	Product Not Found	0	4.98
GCI Compound UST GC-1	E-RWAY	201	04-201	MW	8/30/13	25.94	Product Not Found	0	4.67
GCI Compound UST GC-1	E-RWAY	202	04-202	MW	07/31/2002	25.61			5.29

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
GCI Compound UST GC-1	E-RWAY	202	04-202	MW	9/20/2005	26.22		0.02	4.68
GCI Compound UST GC-1	E-RWAY	202	04-202	MW	9/16/2006	26.82		0.04	4.08
GCI Compound UST GC-1	E-RWAY	202	04-202	MW	9/19/2007	26.14	GRO	0.04	4.76
GCI Compound UST GC-1	E-RWAY	202	04-202	MW	9/20/2008	26.42	Product Not Found	0	4.48
GCI Compound UST GC-1	E-RWAY	202	04-202	MW	9/10/2009	25.21	Product Not Found	0	5.69
GCI Compound UST GC-1	E-RWAY	202	04-202	MW	9/2/2010	26.11	Product Not Found	0	4.79
GCI Compound UST GC-1	E-RWAY	202	04-202	MW	8/30/2011	25.80	GRO	0.03	5.10
GCI Compound UST GC-1	E-RWAY	202	04-202	MW	9/3/2012	26.28	Product Not Found	0	4.62
GCI Compound UST GC-1	E-RWAY	203	04-203	MW	07/31/2002	25.92			5.21
GCI Compound UST GC-1	E-RWAY	203	04-203	MW	9/20/2005	26.46		0	4.67
GCI Compound UST GC-1	E-RWAY	203	04-203	MW	9/21/2006	27.11	Product Not Found	0	4.02
GCI Compound UST GC-1	E-RWAY	203	04-203	MW	9/19/2007	26.44	GRO	0.11	4.69
GCI Compound UST GC-1	E-RWAY	203	04-203	MW	9/20/2008	26.75	GRO	0.07	4.38
GCI Compound UST GC-1	E-RWAY	203	04-203	MW	9/10/2009	26.26	Product Not Found	0	4.87
GCI Compound UST GC-1	E-RWAY	203	04-203	MW	9/2/2010	26.57	Product Not Found	0	4.56
GCI Compound UST GC-1	E-RWAY	203	04-203	MW	8/30/2011	26.14	Product Not Found	0	4.99
GCI Compound UST GC-1	E-RWAY	203	04-203	MW	9/3/2012	26.27	Product Not Found	0	4.86
GCI Compound UST GC-1	E-RWAY	203	04-203	MW	8/30/2013	26.59	Product Not Found	0	4.54
GCI Compound UST GC-1	E-RWAY	204	04-204	MW	07/31/2002	25.38			5.44
GCI Compound UST GC-1	E-RWAY	204	04-204	MW	9/20/2005	25.85		0	4.97
GCI Compound UST GC-1	E-RWAY	204	04-204	MW	9/18/2006	26.52	Product Not Found	0	4.30
GCI Compound UST GC-1	E-RWAY	204	04-204	MW	9/19/2007	25.87	Product Not Found	0	4.95
GCI Compound UST GC-1	E-RWAY	204	04-204	MW	9/20/2008	26.12	Product Not Found	0	4.70
GCI Compound UST GC-1	E-RWAY	204	04-204	MW	9/10/2009	25.60	GRO	0.01	5.22
GCI Compound UST GC-1	E-RWAY	204	04-204	MW	9/2/2010	25.06	Product Not Found	0	4.76
GCI Compound UST GC-1	E-RWAY	204	04-204	MW	8/30/2011	25.47	Product Not Found	0	5.35
GCI Compound UST GC-1	E-RWAY	204	04-204	MW	9/3/2012	25.68	Product Not Found	0	5.14
GCI Compound UST GC-1	E-RWAY	204	04-204	MW	8/30/2013	26.01	GRO	0.01	4.81
GCI Compound UST GC-1	E-RWAY	207	04-207	MW	08/01/2002	24.83			6.16
GCI Compound UST GC-1	E-RWAY	207	04-207	MW	9/20/2005	23.66		0	7.33
GCI Compound UST GC-1	E-RWAY	207	04-207	MW	9/21/2006	25.89	Product Not Found	0	5.10
GCI Compound UST GC-1	E-RWAY	207	04-207	MW	9/19/07	22.92	Product Not Found	0	8.07
GCI Compound UST GC-1	E-RWAY	207	04-207	MW	9/20/2008	26.11	Product Not Found	0	4.88
GCI Compound UST GC-1	E-RWAY	207	04-207	MW	9/10/2009	20.35	Product Not Found	0	10.64
GCI Compound UST GC-1	E-RWAY	207	04-207	MW	9/2/2010	19.92	Product Not Found	0	11.07
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	08/01/2002	24.56			4.85
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	05/13/2003	3.12	Product Not Found	0	26.29
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	9/20/2005	25.10		0	4.31
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	9/16/2006	25.44	Product Not Found	0	3.97
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	9/21/2007	24.78	Product Not Found	0	4.63
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	9/20/2008	25.17	Product Not Found	0	4.05
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	9/10/2009	24.72	Product Not Found	0	4.50
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	9/2/2010	25.02	Product Not Found	0	4.20
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	8/30/2011	24.65	Product Not Found	0	4.57
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	9/3/2012	24.72	Product Not Found	0	4.50
GCI Compound UST GC-1	E-RWAY	210	04-210	MW	8/30/2013	24.96	Product Not Found	0	4.26
GCI Compound UST GC-1	E-RWAY	211	04-211	MW	08/01/2002	23.38			5.07
GCI Compound UST GC-1	E-RWAY	211	04-211	MW	9/20/2005	23.93		0	4.52
GCI Compound UST GC-1	E-RWAY	211	04-211	MW	9/21/2006	24.50	Product Not Found	0	3.95
GCI Compound UST GC-1	E-RWAY	211	04-211	MW	9/19/2007	23.83	Product Not Found	0	4.62

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
GCI Compound UST GC-1	E-RWAY	211	04-211	MW	9/20/2008	24.18	Product Not Found	0	4.27
GCI Compound UST GC-1	E-RWAY	211	04-211	MW	9/10/2009	23.72	Product Not Found	0	4.73
GCI Compound UST GC-1	E-RWAY	211	04-211	MW	9/2/2010	24.04	Product Not Found	0	4.41
GCI Compound UST GC-1	E-RWAY	211	04-211	MW	8/30/2011	23.61	Product Not Found	0	4.84
GCI Compound UST GC-1	E-RWAY	211	04-211	MW	9/3/2012	23.75	Product Not Found	0	4.70
GCI Compound UST GC-1	E-RWAY	211	04-211	MW	8/30/2013	24.08	Product Not Found	0	4.37
GCI Compound UST GC-1	E-RWAY	213	04-213	MW	08/01/2002	23.35			5.35
GCI Compound UST GC-1	E-RWAY	213	04-213	MW	9/20/2005	23.92		0	4.78
GCI Compound UST GC-1	E-RWAY	213	04-213	MW	9/16/2006	24.53	Product Not Found	0	4.17
GCI Compound UST GC-1	E-RWAY	213	04-213	MW	9/20/2007	23.91	Product Not Found	0	4.79
GCI Compound UST GC-1	E-RWAY	213	04-213	MW	9/20/2008	24.17	Product Not Found	0	4.53
GCI Compound UST GC-1	E-RWAY	213	04-213	MW	9/10/2009	22.79	Product Not Found	0	5.91
GCI Compound UST GC-1	E-RWAY	213	04-213	MW	9/2/2010	24.20	Product Not Found	0	4.50
GCI Compound UST GC-1	E-RWAY	213	04-213	MW	8/30/2011	23.56	Product Not Found	0	5.14
GCI Compound UST GC-1	E-RWAY	213	04-213	MW	9/3/2012	23.76	Product Not Found	0	4.94
GCI Compound UST GC-1	E-RWAY	213	04-213	MW	8/30/2013	24.06	Product Not Found	0	4.64
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	10/04/2001	14.15	Product Not Found	0	4.04
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	08/01/2002	13.88			4.31
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	10/17/2002	14.06	Product Not Found	0	4.13
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	05/15/2003	13.52	Product Not Found	0	4.67
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	10/05/2003	14.27	Product Not Found	0	3.92
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	11/04/2003	15.00	Product Not Found	0	3.19
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	09/23/2004	15.20	Product Not Found	0	2.99
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	9/16/2006	14.83	Product Not Found	0	3.36
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	9/19/2007	14.12	Product Not Found	0	4.07
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	9/20/2008	14.59	Product Not Found	0	3.60
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	9/10/2009	14.21	Product Not Found	0	3.98
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	9/2/2010	14.47	Product Not Found	0	3.72
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	8/30/2011	14.20	Product Not Found	0	3.99
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	9/3/2012	14.13	Product Not Found	0	4.06
GCI Compound UST GC-1	E-RWAY	701	04-701	MW	8/30/2013	14.31	Product Not Found	0	3.88
GCI Compound UST GC-1	MDP	109	MRP-MW9	MW	08/01/2002	23.35			5.60
GCI Compound UST GC-1	MDP	109	MRP-MW9	MW	9/20/2005	23.78		0	5.17
GCI Compound UST GC-1	MDP	109	MRP-MW9	MW	9/18/2006	24.49	Product Not Found	0	4.46
GCI Compound UST GC-1	MDP	109	MRP-MW9	MW	9/19/2007	23.62	Product Not Found	0	5.33
GCI Compound UST GC-1	MDP	109	MRP-MW9	MW	9/20/2008	24.10	Product Not Found	0	4.85
GCI Compound UST GC-1	MDP	109	MRP-MW9	MW	9/10/2009	23.54	Product Not Found	0	5.41
GCI Compound UST GC-1	MDP	109	MRP-MW9	MW	9/2/2010	23.91	Product Not Found	0	5.04
GCI Compound UST GC-1	MDP	109	MRP-MW9	MW	8/30/2011	23.38	Product Not Found	0	5.57
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	06/21/2002	18.35	Product Not Found	0	8.05
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	06/28/2002	18.49	Product Not Found	0	7.91
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	07/05/2002	18.51	Product Not Found	0	7.89
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	07/12/2002	19.70	Product Not Found	0	6.70
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	07/19/2002	18.78	Product Not Found	0	7.62
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	07/26/2002	19.95	Product Not Found	0	6.45
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	08/02/2002	19.15	Product Not Found	0	7.25
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	08/09/2002	19.27	Product Not Found	0	7.13
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	08/16/2002	19.41	Product Not Found	0	6.99
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	08/23/2002	19.47	Product Not Found	0	6.93
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	08/30/2002	19.51	Product Not Found	0	6.89

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	09/06/2002	19.53	Product Not Found	0	6.87
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	09/13/2002	19.61	Product Not Found	0	6.79
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	09/20/2002	19.55	Product Not Found	0	6.85
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	09/27/2002	19.61	Product Not Found	0	6.79
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	10/04/2002	19.47	Product Not Found	0	6.93
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	10/11/2002	19.46	Product Not Found	0	6.94
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	10/18/2002	19.32	Product Not Found	0	7.08
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	10/25/2002	19.20	Product Not Found	0	7.20
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	11/01/2002	19.09	Product Not Found	0	7.31
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	11/08/2002	19.05	Product Not Found	0	7.35
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	05/09/2003	18.45	Product Not Found	0	7.95
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	09/27/2003	20.24	Product Not Found	0	6.16
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	10/02/2003	20.22	Product Not Found	0	6.18
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	11/04/2003	20.35	Product Not Found	0	6.05
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	09/15/2004	19.94	Unknown Odor	0	6.46
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	9/22/2005	19.56		0	6.84
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	9/11/2006	20.16	Product Not Found	0	6.24
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	9/21/2007	19.56	Product Not Found	0	6.84
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	9/13/2008	19.76	Product Not Found	0	6.64
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	9/1/2009	19.18	Product Not Found	0	7.22
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	9/4/2010	19.67	Product Not Found	0	6.73
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	9/1/2011	19.23	Product Not Found	0	7.17
Housing Area (Arctic Acres)	298DNTN	416	03-416	MW	8/30/2013	19.96	Product Not Found	0	6.44
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	09/19/2001	23.00	Product Not Found	0	6.76
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	10/07/2001	22.49	Product Not Found	0	7.27
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	11/02/2001	22.06	Product Not Found	0	7.70
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	05/11/2002	20.76	Product Not Found	0	9.00
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	05/17/2002	20.85	Product Not Found	0	8.91
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	05/24/2002	21.02	Product Not Found	0	8.74
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	05/31/2002	21.03	Product Not Found	0	8.73
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	06/07/2002	21.11	Product Not Found	0	8.65
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	06/14/2002	21.21	Product Not Found	0	8.55
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	06/21/2002	23.32	Product Not Found	0	6.44
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	06/28/2002	21.43	Product Not Found	0	8.33
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	07/05/2002	21.54	Product Not Found	0	8.22
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	07/12/2002	22.68	Product Not Found	0	7.08
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	07/19/2002	21.80	Product Not Found	0	7.96
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	07/26/2002	21.96	Product Not Found	0	7.80
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	08/02/2002	22.15	Product Not Found	0	7.61
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	08/09/2002	22.31	Product Not Found	0	7.45
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	08/16/2002	22.45	Product Not Found	0	7.31
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	08/23/2002	22.51	Product Not Found	0	7.25
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	08/30/2002	22.58	Product Not Found	0	7.18
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	09/06/2002	23.61	Product Not Found	0	6.15
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	09/13/2002	22.61	Product Not Found	0	7.15
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	09/20/2002	22.67	Product Not Found	0	7.09
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	09/27/2002	22.71	Product Not Found	0	7.05
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	10/04/2002	22.56	Product Not Found	0	7.20
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	10/11/2002	22.51	Product Not Found	0	7.25
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	10/11/2002	22.54	Product Not Found	0	7.22

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	10/18/2002	22.46	Product Not Found	0	7.30
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	10/25/2002	22.35	Product Not Found	0	7.41
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	11/01/2002	22.25	Product Not Found	0	7.51
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	11/08/2002	22.15	Product Not Found	0	7.61
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	05/09/2003	21.42	Product Not Found	0	8.34
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	10/02/2003	23.48	Product Not Found	0	6.28
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	11/04/2003	23.60	Product Not Found	0	6.16
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	09/16/2004	23.03	Unknown Odor	0	6.73
Housing Area (Arctic Acres)	DOWNTOWN	420	03-420	MW	9/22/2005	22.74		0	7.02
Housing Area (Arctic Acres)	298DNTN	420	03-420	MW	9/11/2006	23.36	Product Not Found	0	6.40
Housing Area (Arctic Acres)	298DNTN	420	03-420	MW	9/21/2007	22.54	Product Not Found	0	7.22
Housing Area (Arctic Acres)	298DNTN	420	03-420	MW	9/13/2008	22.93	Product Not Found	0	6.83
Housing Area (Arctic Acres)	298DNTN	420	03-420	MW	9/1/2009	22.22	Product Not Found	0	7.54
Housing Area (Arctic Acres)	298DNTN	420	03-420	MW	9/4/2010	22.74	Product Not Found	0	7.02
Housing Area (Arctic Acres)	298DNTN	420	03-420	MW	9/1/2011	22.24	Product Not Found	0	7.52
Housing Area (Arctic Acres)	298DNTN	420	03-420	MW	8/30/2013	23.06	Product Not Found	0	6.70
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/11/2001	23.43	Diesel	0.6	6.38
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/12/2001	22.89	Product Not Found	0	6.92
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/13/2001	22.91	Product Not Found	0	6.90
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/14/2001	22.92	Product Not Found	0	6.89
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/15/2001	22.95	Product Not Found	0	6.86
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/16/2001	22.97	Product Not Found	0	6.84
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/17/2001	23.01	Product Not Found	0	6.80
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/18/2001	22.98	Product Not Found	0	6.83
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/19/2001	23.01	Product Not Found	0	6.80
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/20/2001	23.03	Product Not Found	0	6.78
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/21/2001	23.05	Product Not Found	0	6.76
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/22/2001	23.06	Product Not Found	0	6.75
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/23/2001	23.05	Product Not Found	0	6.76
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/24/2001	23.05	Product Not Found	0	6.76
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/31/2001	23.25	Product Not Found	0	6.56
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/01/2001	19.75	Product Not Found	0	10.06
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/02/2001	19.78	Product Not Found	0	10.03
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/04/2001	19.89	Product Not Found	0	9.92
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/08/2001	20.02	Product Not Found	0	9.79
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/09/2001	20.07	Product Not Found	0	9.74
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/11/2001	20.15	Diesel Sheen	0.01	9.66
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/12/2001	20.21	Product Not Found	0	9.60
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/13/2001	20.26	Product Not Found	0	9.55
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/14/2001	19.31	Product Not Found	0	10.50
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/15/2001	20.34	Product Not Found	0	9.47
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/16/2001	20.35	Product Not Found	0	9.46
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/18/2001	20.47	Diesel	0.02	9.34
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/19/2001	20.52	Product Not Found	0	9.29
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/20/2001	20.54	Product Not Found	0	9.27
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/21/2001	20.58	Product Not Found	0	9.23
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/22/2001	20.81	Product Not Found	0	9.00
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/24/2001	20.64	Product Not Found	0	9.17
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/25/2001	20.72	Product Not Found	0	9.09
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/26/2001	20.78	Product Not Found	0	9.03

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/27/2001	20.76	Product Not Found	0	9.05
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/28/2001	20.84	Product Not Found	0	8.97
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/29/2001	20.89	Product Not Found	0	8.92
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/30/2001	20.91	Product Not Found	0	8.90
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/02/2001	20.92	Product Not Found	0	8.89
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/03/2001	20.95	Product Not Found	0	8.86
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/04/2001	20.99	Product Not Found	0	8.82
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/05/2001	21.02	Product Not Found	0	8.79
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/06/2001	21.04	Product Not Found	0	8.77
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/07/2001	21.06	Product Not Found	0	8.75
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/09/2001	21.12	Product Not Found	0	8.69
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/10/2001	21.11	Product Not Found	0	8.70
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/11/2001	21.14	Product Not Found	0	8.67
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/12/2001	21.11	Product Not Found	0	8.70
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/13/2001	21.14	Product Not Found	0	8.67
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/14/2001	21.17	Product Not Found	0	8.64
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/16/2001	21.24	Product Not Found	0	8.57
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/17/2001	21.25	Product Not Found	0	8.56
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/18/2001	21.31	Product Not Found	0	8.50
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/19/2001	21.31	Product Not Found	0	8.50
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/20/2001	21.32	Product Not Found	0	8.49
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/21/2001	21.32	Product Not Found	0	8.49
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/23/2001	21.35	Diesel	0.01	8.46
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/24/2001	21.39	Product Not Found	0	8.42
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/25/2001	21.40	Product Not Found	0	8.41
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/26/2001	21.41	Product Not Found	0	8.40
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/27/2001	21.43	Product Not Found	0	8.38
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/28/2001	21.44	Product Not Found	0	8.37
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/30/2001	21.49	Product Not Found	0	8.32
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/31/2001	21.53	Product Not Found	0	8.28
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/01/2001	21.53	Product Not Found	0	8.28
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/02/2001	21.58	Product Not Found	0	8.23
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/03/2001	21.58	Product Not Found	0	8.23
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/04/2001	21.60	Product Not Found	0	8.21
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/06/2001	21.64	Product Not Found	0	8.17
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/07/2001	21.66	Product Not Found	0	8.15
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/08/2001	21.68	Product Not Found	0	8.13
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/09/2001	21.68	Product Not Found	0	8.13
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/10/2001	21.72	Product Not Found	0	8.09
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/11/2001	21.73	Product Not Found	0	8.08
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/13/2001	21.76	Product Not Found	0	8.05
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/14/2001	21.78	Product Not Found	0	8.03
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/15/2001	21.79	Product Not Found	0	8.02
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/16/2001	21.81	Product Not Found	0	8.00
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/17/2001	21.84	Product Not Found	0	7.97
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/18/2001	21.84	Product Not Found	0	7.97
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/20/2001	21.88	Product Not Found	0	7.93
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/21/2001	21.90	Product Not Found	0	7.91
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/22/2001	21.93	Product Not Found	0	7.88
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/23/2001	21.93	Product Not Found	0	7.88

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/24/2001	21.94	Product Not Found	0	7.87
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/25/2001	21.97	Product Not Found	0	7.84
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/27/2001	22.00	Product Not Found	0	7.81
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/28/2001	22.01	Product Not Found	0	7.80
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/29/2001	22.02	Product Not Found	0	7.79
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/30/2001	22.05	Product Not Found	0	7.76
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/31/2001	22.09	Product Not Found	0	7.72
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/01/2001	22.10			7.71
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/03/2001	22.11			7.70
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/04/2001	22.13			7.68
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/05/2001	22.20			7.61
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/06/2001	22.17			7.64
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/07/2001	22.20			7.61
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/08/2001	22.21			7.60
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/10/2001	22.26			7.55
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/11/2001	22.24			7.57
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/12/2001	22.26			7.55
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/13/2001	23.13			6.68
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/14/2001	22.31			7.50
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/15/2001	22.34			7.47
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/17/2001	22.32			7.49
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/18/2001	22.31			7.50
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/19/2001	22.31	Product Not Found	0	7.50
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/20/2001	22.34			7.47
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/21/2001	22.34			7.47
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/23/2001	22.37			7.44
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/24/2001	22.38			7.43
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/25/2001	22.39			7.42
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/26/2001	22.41			7.40
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/27/2001	22.41			7.40
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/28/2001	22.41			7.40
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/01/2001	22.42	Product Not Found	0	7.39
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/02/2001	22.44	Product Not Found	0	7.37
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/03/2001	22.45	Product Not Found	0	7.36
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/04/2001	22.46	Product Not Found	0	7.35
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/05/2001	22.45	Product Not Found	0	7.36
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/06/2001	22.46	Product Not Found	0	7.35
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/07/2001	22.45	Product Not Found	0	7.36
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/08/2001	22.46	Product Not Found	0	7.35
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/09/2001	22.42	Product Not Found	0	7.39
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/10/2001	22.39	Product Not Found	0	7.42
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/11/2001	22.38	Product Not Found	0	7.43
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/12/2001	22.37	Product Not Found	0	7.44
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/13/2001	22.36	Product Not Found	0	7.45
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/15/2001	22.29	Product Not Found	0	7.52
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/16/2001	22.27	Product Not Found	0	7.54
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/17/2001	22.26	Product Not Found	0	7.55
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/18/2001	22.22	Product Not Found	0	7.59
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/19/2001	22.21	Product Not Found	0	7.60
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/20/2001	22.18	Product Not Found	0	7.63

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/22/2001	22.16	Product Not Found	0	7.65
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/23/2001	22.14	Product Not Found	0	7.67
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/24/2001	22.12	Product Not Found	0	7.69
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/25/2001	22.10	Product Not Found	0	7.71
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/26/2001	22.08	Product Not Found	0	7.73
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/27/2001	22.07	Product Not Found	0	7.74
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/29/2001	22.08	Product Not Found	0	7.73
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/30/2001	22.01	Product Not Found	0	7.80
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/31/2001	22.05	Product Not Found	0	7.76
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/01/2001	22.04	Product Not Found	0	7.77
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/02/2001	22.01	Product Not Found	0	7.80
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/03/2001	22.01	Product Not Found	0	7.80
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/05/2001	21.97	Product Not Found	0	7.84
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/06/2001	21.98	Product Not Found	0	7.83
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/07/2001	21.93	Product Not Found	0	7.88
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/08/2001	21.90	Product Not Found	0	7.91
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/09/2001	21.88	Product Not Found	0	7.93
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/10/2001	21.79	Product Not Found	0	8.02
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/12/2001	21.81	Product Not Found	0	8.00
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/13/2001	21.76	Product Not Found	0	8.05
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/14/2001	21.70	Product Not Found	0	8.11
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/11/2002	20.71	Product Not Found	0	9.10
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/12/2002	20.71	Product Not Found	0	9.10
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/13/2002	20.75	Product Not Found	0	9.06
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/14/2002	20.77	Product Not Found	0	9.04
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/15/2002	20.51	Product Not Found	0	9.30
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/16/2002	20.83	Product Not Found	0	8.98
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/17/2002	20.77	Product Not Found	0	9.04
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/18/2002	20.84	Product Not Found	0	8.97
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/20/2002	20.86	Product Not Found	0	8.95
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/21/2002	20.87	Product Not Found	0	8.94
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/22/2002	20.86	Product Not Found	0	8.95
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/23/2002	20.86	Product Not Found	0	8.95
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/24/2002	20.91	Product Not Found	0	8.90
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/25/2002	20.96	Product Not Found	0	8.85
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/27/2002	20.98	Product Not Found	0	8.83
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/28/2002	20.98	Product Not Found	0	8.83
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/29/2002	20.99	Product Not Found	0	8.82
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/30/2002	21.98	Product Not Found	0	7.83
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/31/2002	20.95	Product Not Found	0	8.86
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/01/2002	21.01	Product Not Found	0	8.80
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/03/2002	21.03	Product Not Found	0	8.78
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/04/2002	21.02	Product Not Found	0	8.79
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/05/2002	21.07	Product Not Found	0	8.74
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/06/2002	21.07	Product Not Found	0	8.74
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/07/2002	21.07	Product Not Found	0	8.74
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/08/2002	21.09	Product Not Found	0	8.72
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/10/2002	21.13	Product Not Found	0	8.68
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/11/2002	21.16	Product Not Found	0	8.65
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/12/2002	21.14	Product Not Found	0	8.67

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/13/2002	21.17	Product Not Found	0	8.64
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/14/2002	21.15	Product Not Found	0	8.66
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/15/2002	21.15	Product Not Found	0	8.66
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/17/2002	21.24	Product Not Found	0	8.57
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/19/2002	21.29	Product Not Found	0	8.52
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/20/2002	21.30	Product Not Found	0	8.51
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/21/2002	21.25	Product Not Found	0	8.56
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/22/2002	21.31	Product Not Found	0	8.50
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/24/2002	21.32	Product Not Found	0	8.49
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/25/2002	31.31	Product Not Found	0	-1.50
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/26/2002	21.33	Product Not Found	0	8.48
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/27/2002	21.36	Product Not Found	0	8.45
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	06/28/2002	21.37	Product Not Found	0	8.44
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/01/2002	21.43	Product Not Found	0	8.38
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/02/2002	21.44	Product Not Found	0	8.37
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/03/2002	21.51	Product Not Found	0	8.30
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/04/2002	21.48	Product Not Found	0	8.33
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/05/2002	21.50	Product Not Found	0	8.31
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/06/2002	21.51	Product Not Found	0	8.30
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/08/2002	21.54	Product Not Found	0	8.27
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/09/2002	21.58	Product Not Found	0	8.23
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/10/2002	21.60	Product Not Found	0	8.21
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/11/2002	21.81	Product Not Found	0	8.00
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/12/2002	21.82	Product Not Found	0	7.99
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/13/2002	21.65	Product Not Found	0	8.16
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/15/2002	21.69	Product Not Found	0	8.12
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/16/2002	21.70	Product Not Found	0	8.11
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/17/2002	21.71	Product Not Found	0	8.10
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/18/2002	21.73	Product Not Found	0	8.08
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/19/2002	21.75	Product Not Found	0	8.06
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/20/2002	22.78	Product Not Found	0	7.03
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/22/2002	21.81	Product Not Found	0	8.00
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/23/2002	21.83	Product Not Found	0	7.98
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/24/2002	21.86	Product Not Found	0	7.95
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/25/2002	21.88	Product Not Found	0	7.93
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/26/2002	21.92	Product Not Found	0	7.89
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/27/2002	21.94	Product Not Found	0	7.87
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/29/2002	21.99	Product Not Found	0	7.82
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/30/2002	21.99	Product Not Found	0	7.82
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	07/31/2002	22.01	Product Not Found	0	7.80
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/01/2002	22.04	Product Not Found	0	7.77
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/02/2002	22.13	Product Not Found	0	7.68
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/03/2002	21.14	Product Not Found	0	8.67
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/05/2002	22.17	Product Not Found	0	7.64
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/06/2002	22.21	Product Not Found	0	7.60
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/07/2002	22.22	Product Not Found	0	7.59
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/08/2002	22.25	Product Not Found	0	7.56
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/09/2002	22.26	Product Not Found	0	7.55
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/10/2002	22.28	Product Not Found	0	7.53
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/12/2002	22.32	Product Not Found	0	7.49

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/13/2002	22.34	Product Not Found	0	7.47
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/14/2002	22.35	Product Not Found	0	7.46
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/15/2002	22.38	Product Not Found	0	7.43
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/16/2002	22.40	Product Not Found	0	7.41
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/17/2002	22.40	Product Not Found	0	7.41
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/19/2002	22.43	Product Not Found	0	7.38
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/20/2002	22.44	Product Not Found	0	7.37
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/21/2002	22.45	Product Not Found	0	7.36
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/22/2002	22.43	Product Not Found	0	7.38
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/23/2002	22.46	Product Not Found	0	7.35
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/24/2002	22.47	Product Not Found	0	7.34
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/26/2002	22.49	Product Not Found	0	7.32
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/27/2002	22.47	Product Not Found	0	7.34
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/28/2002	22.51	Product Not Found	0	7.30
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/29/2002	22.40	Product Not Found	0	7.41
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/30/2002	22.52	Product Not Found	0	7.29
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	08/31/2002	22.52	Product Not Found	0	7.29
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/02/2002	22.51	Product Not Found	0	7.30
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/03/2002	22.55	Product Not Found	0	7.26
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/04/2002	22.55	Product Not Found	0	7.26
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/05/2002	22.54	Product Not Found	0	7.27
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/06/2002	22.54	Product Not Found	0	7.27
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/07/2002	22.55	Product Not Found	0	7.26
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/09/2002	22.57	Product Not Found	0	7.24
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/10/2002	22.56	Product Not Found	0	7.25
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/11/2002	22.56	Product Not Found	0	7.25
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/12/2002	22.57	Product Not Found	0	7.24
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/13/2002	22.60	Product Not Found	0	7.21
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/14/2002	22.61	Product Not Found	0	7.20
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/16/2002	22.60	Product Not Found	0	7.21
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/17/2002	22.61	Product Not Found	0	7.20
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/18/2002	22.61	Product Not Found	0	7.20
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/19/2002	22.63	Product Not Found	0	7.18
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/20/2002	22.62	Product Not Found	0	7.19
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/21/2002	22.63	Product Not Found	0	7.18
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/23/2002	22.63	Product Not Found	0	7.18
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/24/2002	22.63	Product Not Found	0	7.18
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/25/2002	22.64	Product Not Found	0	7.17
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/26/2002	22.63	Product Not Found	0	7.18
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/27/2002	22.61	Product Not Found	0	7.20
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/28/2002	22.57	Product Not Found	0	7.24
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/30/2002	22.55	Product Not Found	0	7.26
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/01/2002	22.53	Product Not Found	0	7.28
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/02/2002	22.63	Product Not Found	0	7.18
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/03/2002	22.51	Product Not Found	0	7.30
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/04/2002	22.50	Product Not Found	0	7.31
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/05/2002	22.49	Product Not Found	0	7.32
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/07/2002	22.52	Product Not Found	0	7.29
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/08/2002	22.51	Product Not Found	0	7.30
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/09/2002	22.50	Product Not Found	0	7.31

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/10/2002	22.47	Product Not Found	0	7.34
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/11/2002	22.51	Product Not Found	0	7.30
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/11/2002	22.50	Product Not Found	0	7.31
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/12/2002	22.47	Product Not Found	0	7.34
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/14/2002	22.47	Product Not Found	0	7.34
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/15/2002	22.44	Product Not Found	0	7.37
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/16/2002	24.43	Product Not Found	0	5.38
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/17/2002	22.42	Product Not Found	0	7.39
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/18/2002	22.40	Product Not Found	0	7.41
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/19/2002	22.41	Product Not Found	0	7.40
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/21/2002	22.37	Product Not Found	0	7.44
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/22/2002	22.34	Product Not Found	0	7.47
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/23/2002	22.31	Product Not Found	0	7.50
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/24/2002	22.29	Product Not Found	0	7.52
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/25/2002	22.28	Product Not Found	0	7.53
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/26/2002	22.26	Product Not Found	0	7.55
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/28/2002	22.23	Product Not Found	0	7.58
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/29/2002	22.22	Product Not Found	0	7.59
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/30/2002	22.20	Product Not Found	0	7.61
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	10/31/2002	22.19	Product Not Found	0	7.62
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/01/2002	22.19	Product Not Found	0	7.62
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/02/2002	22.20	Product Not Found	0	7.61
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/04/2002	22.13	Product Not Found	0	7.68
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/05/2002	22.11	Product Not Found	0	7.70
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/06/2002	22.11	Product Not Found	0	7.70
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/07/2002	22.09	Product Not Found	0	7.72
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/08/2002	22.07	Product Not Found	0	7.74
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	11/09/2002	22.06	Product Not Found	0	7.75
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	05/09/2003	21.37	Product Not Found	0	8.44
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	09/27/2003	23.50	Undetermined	0.08	6.31
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	9/22/2005	22.86		0.22	6.95
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	9/12/2006	23.47		0.13	6.34
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	9/21/2007	22.57	DRO	0.29	7.24
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	9/13/2008	22.94	DRO	0.12	6.87
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	9/1/2009	22.18	Product Not Found	0	7.63
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	9/4/2010	22.43	Product Not Found	0	7.38
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	9/1/2011	22.20	Product Not Found	0	7.61
Housing Area (Arctic Acres)	DOWNTOWN	421	03-421	MW	8/30/2013	23.05	Product Not Found	0	6.76
Housing Area (Arctic Acres)	DOWNTOWN	422	03-422	MW	9/4/2010	21.91	Product Not Found	0	Unknown
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/01/2001	19.70	Product Not Found	0	10.84
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/02/2001	20.72	Product Not Found	0	9.82
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/04/2001	19.81	Product Not Found	0	10.73
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/08/2001	20.98	Product Not Found	0	9.56
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/09/2001	20.99	Product Not Found	0	9.55
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/11/2001	21.11	Product Not Found	0	9.43
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/12/2001	20.21	Product Not Found	0	10.33
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/13/2001	20.21	Product Not Found	0	10.33
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/14/2001	21.25	Product Not Found	0	9.29
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/15/2001	21.28	Product Not Found	0	9.26
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/16/2001	21.32	Product Not Found	0	9.22

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/18/2001	21.40	Product Not Found	0	9.14
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/19/2001	21.45	Product Not Found	0	9.09
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/20/2001	21.51	Product Not Found	0	9.03
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/21/2001	21.51	Product Not Found	0	9.03
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/22/2001	21.56	Product Not Found	0	8.98
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/23/2001	21.58	Product Not Found	0	8.96
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/25/2001	21.66	Product Not Found	0	8.88
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/26/2001	21.68	Product Not Found	0	8.86
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/27/2001	21.72	Product Not Found	0	8.82
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/28/2001	21.78	Product Not Found	0	8.76
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/29/2001	21.82	Product Not Found	0	8.72
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/30/2001	21.83	Product Not Found	0	8.71
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/02/2001	21.86	Product Not Found	0	8.68
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/03/2001	21.88	Product Not Found	0	8.66
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/04/2001	21.93	Product Not Found	0	8.61
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/05/2001	21.93	Product Not Found	0	8.61
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/06/2001	21.98	Product Not Found	0	8.56
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/07/2001	21.99	Product Not Found	0	8.55
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/09/2001	22.02	Product Not Found	0	8.52
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/10/2001	22.02	Diesel Sheen	0.01	8.52
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/11/2001	22.07	Product Not Found	0	8.47
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/12/2001	22.05	Diesel Sheen	0.01	8.49
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/13/2001	22.06	Diesel Sheen	0.01	8.48
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/14/2001	22.08	Product Not Found	0	8.46
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/16/2001	22.12	Product Not Found	0	8.42
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/17/2001	22.14	Diesel Sheen	0.01	8.40
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/18/2001	22.21	Diesel Sheen	0.01	8.33
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/19/2001	21.21	Diesel Sheen	0.01	9.33
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/20/2001	22.23	Diesel	0.01	8.31
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/21/2001	21.24	Diesel	0.01	9.30
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/23/2001	22.43	Diesel	0.19	8.11
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/24/2001	22.30	Diesel	0.06	8.24
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/25/2001	22.28	Diesel Sheen	0.01	8.26
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/26/2001	22.26	Diesel Sheen	0.01	8.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/27/2001	22.32	Diesel	0.03	8.22
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/28/2001	22.35	Diesel	0.01	8.19
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/30/2001	22.51	Diesel	0.17	8.03
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/31/2001	22.40	Diesel Sheen	0.01	8.14
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/01/2001	22.42	Product Not Found	0	8.12
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/02/2001	22.45	Product Not Found	0	8.09
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/03/2001	22.48	Product Not Found	0	8.06
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/04/2001	22.49	Product Not Found	0	8.05
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/06/2001	22.54	Product Not Found	0	8.00
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/07/2001	22.53	Product Not Found	0	8.01
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/08/2001	22.55	Product Not Found	0	7.99
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/09/2001	22.57	Product Not Found	0	7.97
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/10/2001	22.59	Product Not Found	0	7.95
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/11/2001	22.62	Product Not Found	0	7.92
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/13/2001	22.65	Product Not Found	0	7.89
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/14/2001	22.67	Product Not Found	0	7.87

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/15/2001	22.68	Product Not Found	0	7.86
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/16/2001	22.70	Product Not Found	0	7.84
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/17/2001	22.73	Product Not Found	0	7.81
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/18/2001	22.73	Product Not Found	0	7.81
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/20/2001	22.77	Product Not Found	0	7.77
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/21/2001	22.77	Product Not Found	0	7.77
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/22/2001	22.80	Product Not Found	0	7.74
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/23/2001	22.82	Product Not Found	0	7.72
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/24/2001	22.82	Diesel	-0.01	7.72
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/25/2001	22.85	Product Not Found	0	7.69
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/27/2001	22.87	Product Not Found	0	7.67
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/28/2001	22.90	Product Not Found	0	7.64
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/29/2001	22.91	Product Not Found	0	7.63
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/30/2001	22.94	Product Not Found	0	7.60
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/31/2001	22.90	Product Not Found	0	7.64
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/01/2001	22.97			7.57
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/03/2001	22.99			7.55
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/04/2001	23.02			7.52
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/05/2001	23.04			7.50
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/06/2001	23.05			7.49
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/07/2001	23.07			7.47
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/08/2001	23.07			7.47
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/10/2001	23.14			7.40
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/11/2001	23.11			7.43
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/12/2001	23.12			7.42
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/13/2001	23.11			7.43
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/14/2001	23.16			7.38
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/15/2001	23.16			7.38
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/17/2001	23.18			7.36
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/18/2001	23.19			7.35
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/19/2001	23.18			7.36
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/19/2001	20.70	Product Not Found	0	9.84
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/20/2001	23.21			7.33
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/21/2001	23.24			7.30
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/22/2001	23.19			7.35
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/24/2001	23.24			7.30
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/25/2001	23.24			7.30
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/26/2001	23.24			7.30
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/27/2001	23.25			7.29
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/28/2001	23.26			7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/29/2001	23.24			7.30
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/01/2001	23.26			7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/02/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/03/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/04/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/05/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/06/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/07/2001	23.31	Product Not Found	0	7.23
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/08/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/09/2001	23.26	Product Not Found	0	7.28

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/10/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/11/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/12/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/13/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/15/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/16/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/17/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/18/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/19/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/20/2001	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/22/2001	23.26	Diesel	0.29	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/23/2001	23.26	Diesel	0.32	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/24/2001	23.26	Diesel	0.33	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/25/2001	23.26	Diesel	0.36	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/26/2001	23.26	Diesel	0.39	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/29/2001	23.07	Diesel	0.22	7.47
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/30/2001	23.11	Diesel	0.3	7.43
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/02/2001	23.00	Unknown Odor	0.14	7.54
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/03/2001	22.99	Diesel	0.15	7.55
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/05/2001	22.95	Diesel	0.18	7.59
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/09/2001	22.77	Diesel	0.06	7.77
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/13/2001	23.01	Diesel	0.48	7.53
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/14/2001	22.95	Diesel	0.49	7.59
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/11/2002	21.63	Diesel	0.01	8.91
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/12/2002	21.63	Diesel Sheen	0.01	8.91
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/13/2002	21.69	Diesel Sheen	0.01	8.85
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/14/2002	2.72	Diesel	0.01	27.82
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/15/2002	21.76	Diesel	0.02	8.78
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/16/2002	21.76	Diesel	0.01	8.78
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/17/2002	21.70	Diesel	0.01	8.84
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/18/2002	21.81	Diesel	0.01	8.73
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/20/2002	21.84	Diesel	0.04	8.70
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/21/2002	21.82	Product Not Found	0	8.72
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/22/2002	21.81	Diesel	0.05	8.73
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/23/2002	21.71	Diesel	0.01	8.83
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/24/2002	22.18	Diesel	0.34	8.36
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/25/2002	21.96	Diesel	0.1	8.58
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/27/2002	21.97	Diesel	0.11	8.57
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/28/2002	21.95	Diesel	0.07	8.59
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/29/2002	22.02	Diesel	0.15	8.52
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/30/2002	21.99	Diesel	0.11	8.55
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/31/2002	22.19	Diesel	0.36	8.35
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/01/2002	22.21	Diesel	0.3	8.33
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/03/2002	22.08	Diesel	0.15	8.46
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/04/2002	22.08	Diesel	0.14	8.46
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/05/2002	22.10	Diesel	0.15	8.44
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/06/2002	22.07	Diesel	0.1	8.47
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/07/2002	22.11	Diesel	0.16	8.43
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/08/2002	22.07	Diesel	0.08	8.47
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/10/2002	22.20	Diesel	0.18	8.34

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/11/2002	22.20	Diesel	0.14	8.34
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/12/2002	22.21	Diesel	0.18	8.33
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/13/2002	22.18	Diesel	0.12	8.36
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/14/2002	22.17	Diesel	0.14	8.37
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/15/2002	22.09	Diesel	0.04	8.45
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/17/2002	22.24	Diesel	0.1	8.30
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/18/2002	22.19	Diesel	0.02	8.35
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/19/2002	22.22	Diesel	0.04	8.32
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/20/2002	22.21	Diesel Sheen	0.01	8.33
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/21/2002	22.17	Diesel Sheen	0.01	8.37
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/22/2002	22.21	Product Not Found	0	8.33
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/24/2002	22.23	Product Not Found	0	8.31
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/25/2002	22.23	Product Not Found	0	8.31
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/26/2002	22.25	Product Not Found	0	8.29
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/27/2002	22.27	Product Not Found	0	8.27
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/28/2002	22.30	Product Not Found	0	8.24
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	06/29/2002	22.33	Product Not Found	0	8.21
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/01/2002	22.34	Product Not Found	0	8.20
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/02/2002	22.36	Product Not Found	0	8.18
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/03/2002	22.41	Product Not Found	0	8.13
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/04/2002	22.39	Product Not Found	0	8.15
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/05/2002	22.41	Product Not Found	0	8.13
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/06/2002	22.42	Product Not Found	0	8.12
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/08/2002	22.46	Product Not Found	0	8.08
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/09/2002	22.49	Product Not Found	0	8.05
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/10/2002	22.50	Product Not Found	0	8.04
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/11/2002	22.51	Product Not Found	0	8.03
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/12/2002	22.53	Product Not Found	0	8.01
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/13/2002	22.55	Diesel Sheen	0.01	7.99
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/15/2002	22.59	Diesel Sheen	0.01	7.95
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/16/2002	22.61	Product Not Found	0	7.93
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/17/2002	22.60	Diesel Sheen	0.01	7.94
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/18/2002	22.62	Product Not Found	0	7.92
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/19/2002	22.64	Product Not Found	0	7.90
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/20/2002	22.66	Diesel	0.01	7.88
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/22/2002	22.71	Product Not Found	0	7.83
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/23/2002	22.73	Product Not Found	0	7.81
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/24/2002	22.75	Diesel Sheen	0.01	7.79
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/25/2002	22.78	Product Not Found	0	7.76
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/26/2002	22.81	Product Not Found	0	7.73
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/27/2002	22.83	Diesel Sheen	0.01	7.71
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/29/2002	22.88	Product Not Found	0	7.66
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/30/2002	22.90	Product Not Found	0	7.64
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	07/31/2002	22.91	Product Not Found	0	7.63
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/01/2002	22.94	Product Not Found	0	7.60
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/02/2002	22.99	Product Not Found	0	7.55
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/03/2002	23.01	Diesel Sheen	0.01	7.53
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/05/2002	23.07	Product Not Found	0	7.47
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/06/2002	23.09	Product Not Found	0	7.45
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/07/2002	23.11	Product Not Found	0	7.43

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/08/2002	23.13	Diesel Sheen	0.01	7.41
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/09/2002	23.15	Product Not Found	0	7.39
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/10/2002	23.17	Product Not Found	0	7.37
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/12/2002	23.23	Product Not Found	0	7.31
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/13/2002	23.25	Product Not Found	0	7.29
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/14/2002	23.28	Product Not Found	0	7.26
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/15/2002	23.27	Diesel	0.01	7.27
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/16/2002	23.28	Product Not Found	0	7.26
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/17/2002	23.30	Product Not Found	0	7.24
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/19/2002	23.30	Diesel Sheen	0.01	7.24
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/20/2002	23.33	Product Not Found	0	7.21
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/21/2002	23.35	Diesel Sheen	0.01	7.19
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/22/2002	23.33	Product Not Found	0	7.21
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/23/2002	23.37	Product Not Found	0	7.17
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/24/2002	23.36	Product Not Found	0	7.18
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/26/2002	23.38	Product Not Found	0	7.16
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/27/2002	23.38	Product Not Found	0	7.16
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/28/2002	23.41	Product Not Found	0	7.13
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/29/2002	23.41	Product Not Found	0	7.13
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/30/2002	23.41	Product Not Found	0	7.13
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	08/31/2002	23.42	Product Not Found	0	7.12
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/02/2002	23.41	Product Not Found	0	7.13
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/03/2002	23.43	Product Not Found	0	7.11
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/04/2002	23.45	Product Not Found	0	7.09
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/05/2002	23.43	Product Not Found	0	7.11
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/06/2002	23.42	Product Not Found	0	7.12
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/07/2002	23.42	Product Not Found	0	7.12
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/09/2002	23.44	Product Not Found	0	7.10
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/10/2002	23.44	Product Not Found	0	7.10
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/11/2002	23.44	Product Not Found	0	7.10
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/12/2002	23.46	Product Not Found	0	7.08
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/13/2002	23.46	Product Not Found	0	7.08
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/14/2002	23.47	Product Not Found	0	7.07
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/16/2002	23.49	Product Not Found	0	7.05
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/17/2002	23.49	Product Not Found	0	7.05
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/18/2002	23.49	Product Not Found	0	7.05
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/19/2002	23.49	Product Not Found	0	7.05
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/20/2002	23.49	Product Not Found	0	7.05
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/21/2002	23.51	Product Not Found	0	7.03
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/23/2002	23.53	Product Not Found	0	7.01
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/24/2002	23.48	Product Not Found	0	7.06
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/25/2002	23.51	Product Not Found	0	7.03
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/26/2002	23.53	Product Not Found	0	7.01
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/27/2002	23.51	Product Not Found	0	7.03
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/28/2002	23.50	Product Not Found	0	7.04
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/30/2002	23.44	Product Not Found	0	7.10
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/01/2002	23.43	Product Not Found	0	7.11
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/02/2002	23.42	Product Not Found	0	7.12
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/03/2002	23.38	Product Not Found	0	7.16
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/04/2002	23.37	Product Not Found	0	7.17

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/05/2002	23.37	Product Not Found	0	7.17
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/07/2002	23.39	Product Not Found	0	7.15
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/08/2002	23.36	Diesel	0.01	7.18
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/09/2002	23.35	Product Not Found	0	7.19
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/10/2002	23.32	Product Not Found	0	7.22
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/11/2002	23.36	Product Not Found	0	7.18
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/12/2002	23.32	Product Not Found	0	7.22
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/14/2002	23.32	Product Not Found	0	7.22
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/15/2002	23.28	Product Not Found	0	7.26
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/16/2002	23.29	Product Not Found	0	7.25
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/17/2002	23.27	Product Not Found	0	7.27
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/18/2002	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/19/2002	23.26	Product Not Found	0	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/21/2002	23.23	Product Not Found	0	7.31
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/22/2002	23.21	Diesel Sheen	0.01	7.33
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/23/2002	23.20	Diesel	0.01	7.34
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/24/2002	23.15	Diesel Sheen	0.01	7.39
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/25/2002	23.16	Diesel	0.01	7.38
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/25/2002	23.12	Diesel	0.1	7.42
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/26/2002	23.11	Diesel Sheen	0.01	7.43
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/28/2002	23.26	Diesel	0.21	7.28
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/29/2002	4.10	Diesel	0.21	26.44
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/30/2002	23.24	Diesel	0.22	7.30
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	10/31/2002	23.15	Diesel	0.15	7.39
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/01/2002	23.15	Diesel	0.17	7.39
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/02/2002	23.18	Diesel	0.18	7.36
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/04/2002	23.13	Diesel	0.19	7.41
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/05/2002	23.11	Diesel	0.18	7.43
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/06/2002	23.07	Diesel	0.11	7.47
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/07/2002	22.91	Product Not Found	0	7.63
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/08/2002	23.04	Diesel	0.13	7.50
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	11/09/2002	23.11	Diesel	0.2	7.43
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	05/09/2003	22.65	Diesel	0.5	7.89
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	09/27/2003	25.85	Undetermined	1.91	4.69
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	9/22/2005	23.48		0.21	7.06
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	9/12/2006	24.82		0.82	5.72
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	9/21/2007	23.34	DRO	0.48	7.20
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	9/13/2008	23.78	DRO	0.53	6.76
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	9/1/2009	23.06	Product Not Found	0	7.48
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	9/4/2010	23.57	Product Not Found	0	6.97
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	9/1/2011	23.09	Product Not Found	0	7.45
Housing Area (Arctic Acres)	298DNTN	890	03-890	MW	8/30/2013	23.90	Product Not Found	0	6.64
Housing Area (Arctic Acres)	04-201	04-201	04-201	MW	09/19/2001	19.80	Product Not Found	0	6.60
Housing Area (Arctic Acres)	04-202	04-202	04-202	MW	10/07/2001	19.36	Product Not Found	0	7.04
Housing Area (Arctic Acres)	04-203	04-203	04-203	MW	11/02/2001	19.01	Product Not Found	0	7.39
Housing Area (Arctic Acres)	04-204	04-204	04-204	MW	05/11/2002	17.91	Product Not Found	0	8.49
Housing Area (Arctic Acres)	04-207	04-207	04-207	MW	05/17/2002	17.97	Product Not Found	0	8.43
Housing Area (Arctic Acres)	04-210	04-210	04-210	MW	05/24/2002	18.15	Product Not Found	0	8.25
Housing Area (Arctic Acres)	04-211	04-211	04-211	MW	05/31/2002	18.13	Product Not Found	0	8.27
Housing Area (Arctic Acres)	04-213	04-213	04-213	MW	06/07/2002	18.23	Product Not Found	0	8.17

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Housing Area (Arctic Acres)	04-701	04-701	04-701	MW	06/14/2002	18.27	Product Not Found	0	8.13
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	10/02/2001	22.70	Product Not Found	0	6.22
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	10/07/2001	22.64	Product Not Found	0	6.28
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	11/02/2001	22.37	Product Not Found	0	6.55
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	10/17/2002	22.58	Product Not Found	0	6.34
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	05/09/2003	22.06	Product Not Found	0	6.86
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	10/02/2003	23.24	Product Not Found	0	5.68
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	11/04/2003	23.32	Product Not Found	0	5.60
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	09/15/2004	23.29	Unknown Odor	0	5.63
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	9/22/2005	22.87		0	6.05
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	9/11/2006	23.40	Product Not Found	0	5.52
Housing Area (Arctic Acres)	298DNTN	1000	AA-01	MW	9/21/2007	22.78	Product Not Found	0	6.14
Housing Area (Arctic Acres)	298DNTN	1001	AA-02	MW	10/03/2001	25.22	Product Not Found	0	7.18
Housing Area (Arctic Acres)	298DNTN	1001	AA-02	MW	10/07/2001	25.22	Product Not Found	0	7.18
Housing Area (Arctic Acres)	298DNTN	1001	AA-02	MW	11/02/2001	24.78	Product Not Found	0	7.62
Housing Area (Arctic Acres)	298DNTN	1001	AA-02	MW	10/12/2002	24.64	Product Not Found	0	7.76
Housing Area (Arctic Acres)	298DNTN	1001	AA-02	MW	05/09/2003	24.08	Product Not Found	0	8.32
Housing Area (Arctic Acres)	298DNTN	1001	AA-02	MW	9/4/2010	25.48	Product Not Found	0	6.92
Housing Area (Arctic Acres)	298DNTN	1002	AA-03	MW	10/04/2001	26.82	Product Not Found	0	7.03
Housing Area (Arctic Acres)	298DNTN	1002	AA-03	MW	10/07/2001	26.86	Product Not Found	0	6.99
Housing Area (Arctic Acres)	298DNTN	1002	AA-03	MW	11/02/2001	26.50	Product Not Found	0	7.35
Housing Area (Arctic Acres)	298DNTN	1002	AA-03	MW	05/09/2003	26.00	Product Not Found	0	7.85
Housing Area (Arctic Acres)	298DNTN	1003	AA-04	MW	10/04/2001	26.57	Product Not Found	0	7.24
Housing Area (Arctic Acres)	298DNTN	1003	AA-04	MW	10/07/2001	26.60	Product Not Found	0	7.21
Housing Area (Arctic Acres)	298DNTN	1003	AA-04	MW	11/02/2001	26.12	Product Not Found	0	7.69
Housing Area (Arctic Acres)	298DNTN	1003	AA-04	MW	05/09/2003	25.60	Product Not Found	0	8.21
Housing Area (Arctic Acres)	298DNTN	1004	AA-05	MW	10/03/2001	25.85	Product Not Found	0	7.22
Housing Area (Arctic Acres)	298DNTN	1004	AA-05	MW	10/07/2001	25.87	Product Not Found	0	7.20
Housing Area (Arctic Acres)	298DNTN	1004	AA-05	MW	11/02/2001	25.42	Product Not Found	0	7.65
Housing Area (Arctic Acres)	298DNTN	1004	AA-05	MW	10/11/2002	25.90	Product Not Found	0	7.17
Housing Area (Arctic Acres)	298DNTN	1004	AA-05	MW	05/09/2003	24.78	Product Not Found	0	8.29
Housing Area (Arctic Acres)	298DNTN	1005	AA-06	MW	10/02/2001	23.60	Product Not Found	0	7.38
Housing Area (Arctic Acres)	298DNTN	1005	AA-06	MW	10/07/2001	23.64	Product Not Found	0	7.34
Housing Area (Arctic Acres)	298DNTN	1005	AA-06	MW	11/02/2001	22.22	Product Not Found	0	8.76
Housing Area (Arctic Acres)	298DNTN	1005	AA-06	MW	10/12/2002	23.68	Product Not Found	0	7.30
Housing Area (Arctic Acres)	298DNTN	1005	AA-06	MW	05/09/2003	22.51	Product Not Found	0	8.47
Housing Area (Arctic Acres)	298DNTN	1005	AA-06	MW	9/4/2010	23.93	Product Not Found	0	7.05
NMCB, UST T-1416-A			02-300		9/15/2006	9.98	Product Not Found	0	2.01
NMCB, UST T-1416-A			02-300		9/19/2007	9.03	DRO	0.12	2.96
NMCB, UST T-1416-A			02-300		9/24/2008	10.21	DRO	0.53	1.78
NMCB, UST T-1416-A			02-300		9/16/2009	9.81	DRO	0.6	2.18
NMCB, UST T-1416-A			02-300	MW	9/11/2010	9.73	DRO	0.66	2.24
NMCB, UST T-1416-A			02-300	MW	9/7/2011	10.16	Product Not Found	0	1.83
NMCB, UST T-1416-A			02-300	MW	8/28/2012	10.37	Product Not Found	0.69	1.62
NMCB, UST T-1416-A			02-300	MW	8/31/2013	9.95	GRO	0.44	2.04
NMCB, UST T-1416-A			02-301		9/15/2006	12.67	Product Not Found	0	2.20
NMCB, UST T-1416-A			02-301		9/19/2007	11.87	Product Not Found	0	3.00
NMCB, UST T-1416-A			02-301		9/24/2008	12.61	Product Not Found	0	2.26
NMCB, UST T-1416-A			02-301		9/16/2009	12.39	Product Not Found	0	2.48
NMCB, UST T-1416-A			02-301	MW	9/11/2010	12.75	Product Not Found	0	2.12

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A			02-301	MW	9/7/2011	12.63	Product Not Found	0	2.24
NMCB, UST T-1416-A			02-301	MW	8/28/2012	12.67	Product Not Found	0	2.20
NMCB, UST T-1416-A			02-301	MW	8/31/2013	12.36	Product Not Found	0	2.51
NMCB, UST T-1416-A			02-302		9/15/2006	15.45	Product Not Found	0	2.38
NMCB, UST T-1416-A			02-302		9/19/2007	14.65	Product Not Found	0	3.18
NMCB, UST T-1416-A			02-451		9/22/2006	8.63	Product Not Found	0	2.36
NMCB, UST T-1416-A			02-451		9/13/2007	8.04	Product Not Found	0	2.95
NMCB, UST T-1416-A			02-451		9/24/2008	8.93	Product Not Found	0	2.06
NMCB, UST T-1416-A			02-451		9/15/2009	8.78	Product Not Found	0	2.21
NMCB, UST T-1416-A			02-451	MW	9/10/2010	8.88	Product Not Found	0	2.11
NMCB, UST T-1416-A			02-451	MW	9/7/2011	8.73	Product Not Found	0	2.26
NMCB, UST T-1416-A			02-451	MW	8/28/2012	9.25	Product Not Found	0	1.74
NMCB, UST T-1416-A			02-451	MW	8/31/2013	8.51	Product Not Found	0	2.48
NMCB, UST T-1416-A			02-452		9/23/2006	9.50	Product Not Found	0	2.44
NMCB, UST T-1416-A			02-452		9/14/2007	9.03	Product Not Found	0	2.91
NMCB, UST T-1416-A			02-452		9/24/2008	9.71	Product Not Found	0	2.23
NMCB, UST T-1416-A			02-452		9/15/2009	9.42	Product Not Found	0	2.52
NMCB, UST T-1416-A			02-452	MW	9/10/2010	9.71	Product Not Found	0	2.23
NMCB, UST T-1416-A			02-452	MW	9/7/2011	9.70	Product Not Found	0	2.24
NMCB, UST T-1416-A			02-452	MW	8/28/2012	9.68	Product Not Found	0	2.26
NMCB, UST T-1416-A			02-452	MW	8/31/2013	9.32	Product Not Found	0	2.62
NMCB, UST T-1416-A			02-453		9/22/2006	9.18	Product Not Found	0	2.50
NMCB, UST T-1416-A			02-453		9/14/2007	8.73	Product Not Found	0	2.95
NMCB, UST T-1416-A			02-453		9/24/2008	9.52	Product Not Found	0	2.16
NMCB, UST T-1416-A			02-453		9/16/2009	9.02	Product Not Found	0	2.66
NMCB, UST T-1416-A			02-453	MW	9/11/2010	9.42	Product Not Found	0	2.26
NMCB, UST T-1416-A			02-453	MW	9/7/2011	9.42	Product Not Found	0	2.26
NMCB, UST T-1416-A			02-453	MW	8/28/2012	9.58	Product Not Found	0	2.10
NMCB, UST T-1416-A			02-453	MW	8/31/2013	9.19	Product Not Found	0	2.49
NMCB, UST T-1416-A			02-455		9/25/2006	11.63	Product Not Found	0	2.45
NMCB, UST T-1416-A			02-455		9/15/2007	11.31	Product Not Found	0	2.77
NMCB, UST T-1416-A			02-455		9/24/2008	11.53	Product Not Found	0	2.55
NMCB, UST T-1416-A			02-455		9/16/2009	11.93	DRO	0.05	2.15
NMCB, UST T-1416-A			02-455	MW	9/10/2010	11.97	Product Not Found	0	2.11
NMCB, UST T-1416-A			02-455	MW	9/7/2011	12.31	Product Not Found	0	1.77
NMCB, UST T-1416-A			02-455	MW	8/28/2012	12.40	Product Not Found	0	1.68
NMCB, UST T-1416-A			02-455	MW	8/31/2013	11.53	Product Not Found	0	2.55
NMCB, UST T-1416-A			02-461		9/25/2006	6.98	Product Not Found	0	2.43
NMCB, UST T-1416-A			02-461		9/18/2007	6.18	Product Not Found	0	3.23
NMCB, UST T-1416-A			02-461		9/24/2008	7.10	Product Not Found	0	2.31
NMCB, UST T-1416-A			02-461		9/15/2009	6.72	Product Not Found	0	2.69
NMCB, UST T-1416-A			02-461	MW	9/11/2010	7.15	Product Not Found	TRACE	2.26
NMCB, UST T-1416-A			02-461	MW	9/7/2011	7.07	Product Not Found	0	2.34
NMCB, UST T-1416-A			02-461	MW	8/28/2012	7.13	Product Not Found	0	2.28
NMCB, UST T-1416-A			02-461	MW	8/31/2013	6.74	Product Not Found	0	2.67
NMCB, UST T-1416-A			02-463		9/15/2006	10.41		0.01	2.17
NMCB, UST T-1416-A			02-463		9/19/2007	9.51	DRO	0.01	3.07
NMCB, UST T-1416-A			02-463		9/24/2008	10.40	Product Not Found	0	2.18
NMCB, UST T-1416-A			02-463		9/16/2009	9.99	DRO	0.04	2.59
NMCB, UST T-1416-A			02-463	MW	9/11/2010	10.30	DRO	0.04	2.28

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A			02-463	MW	9/7/2011	10.27	Product Not Found	0	2.31
NMCB, UST T-1416-A			02-463	MW	8/28/2012	10.12	Product Not Found	0	2.46
NMCB, UST T-1416-A			02-463	MW	8/31/2013	9.71	Product Not Found	0	2.87
NMCB, UST T-1416-A			02-475		9/15/2006	NL		NM	NM
NMCB, UST T-1416-A			02-478		9/25/2006	7.87	Product Not Found	0	2.37
NMCB, UST T-1416-A			02-478		9/15/2007	7.40	Product Not Found	0	2.84
NMCB, UST T-1416-A			02-478		9/24/2008	8.02	Product Not Found	0	2.22
NMCB, UST T-1416-A			02-478	MW	9/10/2010	8.03	Product Not Found	0	2.21
NMCB, UST T-1416-A			02-478	MW	9/7/2011	7.92	Product Not Found	0	2.32
NMCB, UST T-1416-A			02-478	MW	8/28/2012	8.20	Product Not Found	0	2.04
NMCB, UST T-1416-A			02-478	MW	8/31/2013	7.83	Product Not Found	0	2.41
NMCB, UST T-1416-A			02-479		9/25/2006	13.98	Product Not Found	0	-0.51
NMCB, UST T-1416-A			02-479		9/15/2007	13.53	Product Not Found	0	2.72
NMCB, UST T-1416-A			02-479		9/24/2008	13.64	Product Not Found	0	2.61
NMCB, UST T-1416-A			02-479		9/15/2009	13.44	Product Not Found	0	2.81
NMCB, UST T-1416-A			02-479	MW	9/11/2010	14.06	Product Not Found	0	2.19
NMCB, UST T-1416-A			02-479	MW	9/7/2011	13.52	Product Not Found	0	2.73
NMCB, UST T-1416-A			02-479	MW	8/28/2012	12.97	Product Not Found	0	3.28
NMCB, UST T-1416-A			02-479	MW	8/31/2013	12.78	Product Not Found	0	3.47
NMCB, UST T-1416-A			02-489		9/22/2006	NL		NM	NM
NMCB, UST T-1416-A			02-497		9/15/2006	7.21	Product Not Found	0	1.94
NMCB, UST T-1416-A			02-497		9/19/2007	6.18	Product Not Found	0	2.97
NMCB, UST T-1416-A			02-497		9/24/2008	7.16	Product Not Found	0	1.99
NMCB, UST T-1416-A			02-497		9/16/2009	6.74	Product Not Found	0	2.41
NMCB, UST T-1416-A			02-497	MW	9/11/2010	6.83	DRO	0.50	2.32
NMCB, UST T-1416-A			02-497	MW	9/7/2011	7.26	Product Not Found	0	1.89
NMCB, UST T-1416-A			02-497	MW	8/28/2012	7.34		0.08	1.81
NMCB, UST T-1416-A			02-497	MW	8/31/2013	6.69	Product Not Found	0	2.46
NMCB, UST T-1416-A	NMCB	812	02-812	MW	11/03/2001	17.02	Product Not Found	0	2.98
NMCB, UST T-1416-A	NMCB	812	02-812	MW	04/01/2002	17.63	Product Not Found	0	2.37
NMCB, UST T-1416-A	NMCB	813	02-813	MW	04/01/2002	17.14	Product Not Found	0	1.83
NMCB, UST T-1416-A	NMCB	813	02-813	MW	9/23/2006	16.63	Product Not Found	0	2.34
NMCB, UST T-1416-A	NMCB	813	02-813	MW	9/14/2007	16.25	Product Not Found	0	2.72
NMCB, UST T-1416-A	NMCB	813	02-813	MW	9/24/2008	16.85	Product Not Found	0	2.12
NMCB, UST T-1416-A	NMCB	814	02-814	MW	06/25/2001	17.36	Product Not Found	0	3.16
NMCB, UST T-1416-A	NMCB	814	02-814	MW	11/03/2001	17.17	Product Not Found	0	3.35
NMCB, UST T-1416-A	NMCB	814	02-814	MW	04/01/2002	17.14	Product Not Found	0	3.38
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/14/2001	12.91			3.44
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/18/2001	13.71			2.64
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/23/2001	13.61			2.74
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/28/2001	13.51			2.84
NMCB, UST T-1416-A	NMCB	815	02-815	MW	06/01/2001	13.68	Product Not Found	0	2.67
NMCB, UST T-1416-A	NMCB	815	02-815	MW	06/08/2001	13.56	Product Not Found	0	2.79
NMCB, UST T-1416-A	NMCB	815	02-815	MW	06/15/2001	14.32	Mixed Product	0.48	2.03
NMCB, UST T-1416-A	NMCB	815	02-815	MW	06/22/2001	13.21	Product Not Found	0	3.14
NMCB, UST T-1416-A	NMCB	815	02-815	MW	06/25/2001	14.01	Product Not Found	0	2.34
NMCB, UST T-1416-A	NMCB	815	02-815	MW	06/27/2001	13.69	Product Not Found	0	2.66
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/06/2001	13.66	Product Not Found	0	2.69
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/13/2001	13.47	Product Not Found	0	2.88
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/20/2001	14.02	Product Not Found	0	2.33

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/27/2001	13.67	Mixed Product	0.01	2.68
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/03/2001	13.63	Product Not Found	0	2.72
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/10/2001	13.99	Mixed Product	0.18	2.36
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/17/2001	13.70	Product Not Found	0	2.65
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/24/2001	14.78	Mixed Product	0.83	1.57
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/31/2001	13.74	Product Not Found	0	2.61
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/07/2001	13.15	Product Not Found	0	3.20
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/08/2001	14.90	Mixed Product	0.82	1.45
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/10/2001	14.26	Mixed Product	0.01	2.09
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/11/2001	14.03	Product Not Found	0	2.32
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/12/2001	14.01	Product Not Found	0	2.34
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/14/2001	13.74	Product Not Found	0	2.61
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/21/2001	13.62	Product Not Found	0	2.73
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/28/2001	14.02	Product Not Found	0	2.33
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/29/2001	13.97	Product Not Found	0	2.38
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/29/2001	13.74	Product Not Found	0	2.61
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/05/2001	13.23	Product Not Found	0	3.12
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/12/2001	13.43	Product Not Found	0	2.92
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/19/2001	13.28	Product Not Found	0	3.07
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/26/2001	14.09	Mixed Product	0.06	2.26
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/02/2001	13.31	Product Not Found	0	3.04
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/03/2001	13.54	Product Not Found	0	2.81
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/09/2001	13.41	Product Not Found	0	2.94
NMCB, UST T-1416-A	NMCB	815	02-815	MW	04/01/2002	14.55	Product Not Found	0	1.80
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/11/2002	15.28	Mixed Product	1.26	1.07
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/12/2002	13.91	Product Not Found	0	2.44
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/13/2002	13.35	Product Not Found	0	3.00
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/14/2002	13.92	Product Not Found	0	2.43
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/15/2002	14.11	Product Not Found	0	2.24
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/16/2002	13.67	Product Not Found	0	2.68
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/17/2002	13.20	Product Not Found	0	3.15
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/24/2002	13.45	Product Not Found	0	2.90
NMCB, UST T-1416-A	NMCB	815	02-815	MW	05/31/2002	12.96	Product Not Found	0	3.39
NMCB, UST T-1416-A	NMCB	815	02-815	MW	06/07/2002	13.64	Product Not Found	0	2.71
NMCB, UST T-1416-A	NMCB	815	02-815	MW	06/14/2002	13.15	Product Not Found	0	3.20
NMCB, UST T-1416-A	NMCB	815	02-815	MW	06/21/2002	13.79	Product Not Found	0	2.56
NMCB, UST T-1416-A	NMCB	815	02-815	MW	06/28/2002	13.17	Product Not Found	0	3.18
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/03/2002	15.04	Mixed Product	1.12	1.31
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/04/2002	14.71	Mixed Product	0.69	1.64
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/05/2002	14.71	Mixed Product	0.56	1.64
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/06/2002	14.21	Mix Sheen	0.01	2.14
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/08/2002	13.84	Mix Sheen	0.01	2.51
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/09/2002	13.99	Mix Sheen	0.01	2.36
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/10/2002	14.31	Product Not Found	0	2.04
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/11/2002	13.49	Product Not Found	0	2.86
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/12/2002	13.71	Product Not Found	0	2.64
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/13/2002	14.88	Product Not Found	0	1.47
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/15/2002	14.02	Product Not Found	0	2.33
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/16/2002	13.79	Product Not Found	0	2.56
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/17/2002	13.94	Mixed Product	0.03	2.41

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/18/2002	13.96	Mix Sheen	0.01	2.39
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/19/2002	13.67	Product Not Found	0	2.68
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/20/2002	13.49	Product Not Found	0	2.86
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/22/2002	13.24	Product Not Found	0	3.11
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/23/2002	13.41	Product Not Found	0	2.94
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/25/2002	12.96	Product Not Found	0	3.39
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/26/2002	13.27	Mix Sheen	0.01	3.08
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/27/2002	13.36	Mix Sheen	0.01	2.99
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/29/2002	13.80	Product Not Found	0	2.55
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/30/2002	13.93	Mix Sheen	0.01	2.42
NMCB, UST T-1416-A	NMCB	815	02-815	MW	07/31/2002	14.38	Mixed Product	0.41	1.97
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/01/2002	14.19	Mixed Product	0.17	2.16
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/02/2002	14.12	Product Not Found	0	2.23
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/03/2002	14.04	Product Not Found	0	2.31
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/05/2002	13.80	Product Not Found	0	2.55
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/06/2002	13.76	Product Not Found	0	2.59
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/07/2002	13.84	Product Not Found	0	2.51
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/08/2002	13.82	Product Not Found	0	2.53
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/09/2002	13.66	Product Not Found	0	2.69
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/10/2002	13.52	Product Not Found	0	2.83
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/12/2002	13.52	Product Not Found	0	2.83
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/13/2002	13.81	Product Not Found	0	2.54
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/14/2002	14.23	Mixed Product	0.18	2.12
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/15/2002	14.56	Mixed Product	0.32	1.79
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/16/2002	14.34	Mix Sheen	0.01	2.01
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/17/2002	14.16	Mix Sheen	0.01	2.19
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/19/2002	13.74	Product Not Found	0	2.61
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/20/2002	13.45	Product Not Found	0	2.90
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/21/2002	13.57	Product Not Found	0	2.78
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/22/2002	13.61	Product Not Found	0	2.74
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/23/2002	13.68	Product Not Found	0	2.67
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/24/2002	13.76	Product Not Found	0	2.59
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/26/2002	14.03	Product Not Found	0	2.32
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/27/2002	13.72	Product Not Found	0	2.63
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/28/2002	13.67	Product Not Found	0	2.68
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/29/2002	14.88	Mix Sheen	0.01	1.47
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/30/2002	14.11	Mix Sheen	0.01	2.24
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/31/2002	14.01	Product Not Found	0	2.34
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/02/2002	14.21	Mix Sheen	0.01	2.14
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/03/2002	13.74	Mix Sheen	0.01	2.61
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/04/2002	13.93	Product Not Found	0	2.42
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/05/2002	13.98	Product Not Found	0	2.37
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/06/2002	14.20	Product Not Found	0	2.15
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/07/2002	13.86	Product Not Found	0	2.49
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/09/2002	14.11	Mixed Product	0.28	2.24
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/10/2002	14.76	Mixed Product	0.8	1.59
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/11/2002	13.42	Mix Sheen	0.01	2.93
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/12/2002	13.73	Product Not Found	0	2.62
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/13/2002	13.72	Product Not Found	0	2.63
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/14/2002	13.84	Product Not Found	0	2.51

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/16/2002	13.71	Product Not Found	0	2.64
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/17/2002	13.94	Product Not Found	0	2.41
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/18/2002	13.93	Product Not Found	0	2.42
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/19/2002	13.87	Product Not Found	0	2.48
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/20/2002	14.06	Product Not Found	0	2.29
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/21/2002	13.88	Product Not Found	0	2.47
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/23/2002	13.59	Product Not Found	0	2.76
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/24/2002	13.44	Product Not Found	0	2.91
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/25/2002	13.07	Product Not Found	0	3.28
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/26/2002	13.29	Product Not Found	0	3.06
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/27/2002	13.41	Product Not Found	0	2.94
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/28/2002	13.85	Product Not Found	0	2.50
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/30/2002	14.06	Product Not Found	0	2.29
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/01/2002	13.86	Product Not Found	0	2.49
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/02/2002	14.03	Product Not Found	0	2.32
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/03/2002	13.98	Product Not Found	0	2.37
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/04/2002	13.83	Product Not Found	0	2.52
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/05/2002	13.60	Product Not Found	0	2.75
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/07/2002	13.75	Product Not Found	0	2.60
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/08/2002	13.74	Mix Sheen	0.01	2.61
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/09/2002	13.14	Product Not Found	0	3.21
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/10/2002	13.24	Mix Sheen	0.01	3.11
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/11/2002	13.17	Product Not Found	0	3.18
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/12/2002	13.39	Product Not Found	0	2.96
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/14/2002	13.39	Product Not Found	0	2.96
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/15/2002	13.47	Product Not Found	0	2.88
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/16/2002	13.25	Product Not Found	0	3.10
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/17/2002	13.38	Product Not Found	0	2.97
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/18/2002	13.21	Product Not Found	0	3.14
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/19/2002	12.99	Product Not Found	0	3.36
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/21/2002	12.85	Product Not Found	0	3.50
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/22/2002	12.95	Product Not Found	0	3.40
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/23/2002	12.93	Product Not Found	0	3.42
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/24/2002	12.79	Product Not Found	0	3.56
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/25/2002	12.87	Product Not Found	0	3.48
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/26/2002	12.98	Product Not Found	0	3.37
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/28/2002	13.02	Product Not Found	0	3.33
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/29/2002	13.12	Product Not Found	0	3.23
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/30/2002	13.09	Product Not Found	0	3.26
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/31/2002	12.98	Product Not Found	0	3.37
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/01/2002	12.95	Mix Sheen	0.01	3.40
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/02/2002	13.31	Product Not Found	0	3.04
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/04/2002	12.99	Product Not Found	0	3.36
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/05/2002	12.64	Product Not Found	0	3.71
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/06/2002	12.14	Product Not Found	0	4.21
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/07/2002	12.26	Product Not Found	0	4.09
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/08/2002	12.55	Product Not Found	0	3.80
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/09/2002	12.98	Product Not Found	0	3.37
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/14/2003	13.24	Product Not Found	0	3.11
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/02/2004	13.91	Product Not Found	0	2.44

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/03/2004	14.22	Product Not Found	0	2.13
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/03/2004	14.08	Product Not Found	0	2.27
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/04/2004	13.65	Product Not Found	0	2.70
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/04/2004	13.62	Product Not Found	0	2.73
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/08/2004	14.11	Product Not Found	0	2.24
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/09/2004	13.97	Product Not Found	0	2.38
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/11/2004	13.41	Product Not Found	0	2.94
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/13/2004	13.30	Product Not Found	0	3.05
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/17/2004	13.39	Product Not Found	0	2.96
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/20/2004	13.45	Product Not Found	0	2.90
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/23/2004	13.43	Product Not Found	0	2.92
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/27/2004	13.76	Product Not Found	0	2.59
NMCB, UST T-1416-A	NMCB	815	02-815	MW	08/31/2004	13.47	Product Not Found	0	2.88
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/03/2004	14.15	Product Not Found	0	2.20
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/07/2004	14.16	Mix Sheen	0.01	2.19
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/10/2004	13.71	Mixed Product	0.02	2.64
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/14/2004	14.01	Mix Sheen	0.01	2.34
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/21/2004	14.07	Product Not Found	0	2.28
NMCB, UST T-1416-A	NMCB	815	02-815	MW	09/27/2004	14.14	Mix Sheen	0.01	2.21
NMCB, UST T-1416-A	NMCB	815	02-815	MW	10/22/2004	13.61	Product Not Found	0	2.74
NMCB, UST T-1416-A	NMCB	815	02-815	MW	11/03/2004	13.20	Product Not Found	0	3.15
NMCB, UST T-1416-A	NMCB	815	02-815	MW	12/03/2004	13.03	Product Not Found	0	3.32
NMCB, UST T-1416-A	NMCB	02-815	02-815		9/15/2006	13.99		0	2.36
NMCB, UST T-1416-A	NMCB	815	02-815	MW	9/19/2007	14.23	Product Not Found	0	2.12
NMCB, UST T-1416-A	NMCB	815	02-815	MW	9/24/2008	14.11	DRO	0.01	2.24
NMCB, UST T-1416-A	NMCB	815	02-815	MW	9/16/2009	13.68	Product Not Found	0	2.67
NMCB, UST T-1416-A	NMCB	815	02-815	MW	9/11/2010	14.11	DRO	1.08	2.24
NMCB, UST T-1416-A	NMCB	815	02-815	MW	9/7/2011	13.94	Product Not Found	0	2.41
NMCB, UST T-1416-A	NMCB	815	02-815	MW	8/28/2012	14.27	DRO	0.05	2.08
NMCB, UST T-1416-A	NMCB	815	02-815	MW	8/31/2013	13.90	DRO	Trace	2.45
NMCB, UST T-1416-A	NMCB	816	02-816	MW	06/25/2001	10.83	Product Not Found	0	2.03
NMCB, UST T-1416-A	NMCB	816	02-816	MW	11/03/2001	10.20	Product Not Found	0	2.66
NMCB, UST T-1416-A	NMCB	816	02-816	MW	04/01/2002	11.12	Product Not Found	0	1.74
NMCB, UST T-1416-A	NMCB	816	02-816	MW	08/02/2004	10.63	Product Not Found	0	2.23
NMCB, UST T-1416-A	NMCB	816	02-816	MW	08/09/2004	10.71	Product Not Found	0	2.15
NMCB, UST T-1416-A	NMCB	816	02-816	MW	08/13/2004	9.96	Product Not Found	0	2.90
NMCB, UST T-1416-A	NMCB	816	02-816	MW	08/17/2004	10.01	Product Not Found	0	2.85
NMCB, UST T-1416-A	NMCB	816	02-816	MW	08/20/2004	10.17	Product Not Found	0	2.69
NMCB, UST T-1416-A	NMCB	816	02-816	MW	08/23/2004	10.10	Product Not Found	0	2.76
NMCB, UST T-1416-A	NMCB	816	02-816	MW	08/27/2004	10.57	Product Not Found	0	2.29
NMCB, UST T-1416-A	NMCB	816	02-816	MW	08/31/2004	10.10	Product Not Found	0	2.76
NMCB, UST T-1416-A	NMCB	816	02-816	MW	09/03/2004	10.81	Product Not Found	0	2.05
NMCB, UST T-1416-A	NMCB	816	02-816	MW	09/07/2004	10.86	Product Not Found	0	2.00
NMCB, UST T-1416-A	NMCB	816	02-816	MW	09/10/2004	10.41	Product Not Found	0	2.45
NMCB, UST T-1416-A	NMCB	816	02-816	MW	09/14/2004	10.71	Mix Sheen	0.01	2.15
NMCB, UST T-1416-A	NMCB	816	02-816	MW	09/21/2004	10.70	Product Not Found	0	2.16
NMCB, UST T-1416-A	NMCB	816	02-816	MW	09/27/2004	10.96	Product Not Found	0	1.90
NMCB, UST T-1416-A	NMCB	816	02-816	MW	10/22/2004	10.46	Product Not Found	0	2.40
NMCB, UST T-1416-A	NMCB	816	02-816	MW	10/22/2004	10.47	Product Not Found	0	2.39
NMCB, UST T-1416-A	NMCB	816	02-816	MW	11/03/2004	9.83	Product Not Found	0	3.03

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	816	02-816	MW	12/03/2004	9.67	Product Not Found	0	3.19
NMCB, UST T-1416-A	NMCB	816	02-816	MW	9/15/2006	10.79	Product Not Found	0	2.07
NMCB, UST T-1416-A	NMCB	816	02-816	MW	9/19/2007	9.89	Product Not Found	0	2.97
NMCB, UST T-1416-A	NMCB	816	02-816	MW	9/24/2008	10.84	Product Not Found	0	2.02
NMCB, UST T-1416-A	NMCB	816	02-816	MW	9/16/2009	10.44	Product Not Found	0	2.42
NMCB, UST T-1416-A	NMCB	816	02-816	MW	9/11/2010	10.65	Product Not Found	0	2.21
NMCB, UST T-1416-A	NMCB	816	02-816	MW	9/7/2011	10.72	Product Not Found	0	2.14
NMCB, UST T-1416-A	NMCB	816	02-816	MW	8/28/2012	11.00	Product Not Found	0	1.86
NMCB, UST T-1416-A	NMCB	816	02-816	MW	8/31/2013	10.60	Product Not Found	0	2.26
NMCB, UST T-1416-A	NMCB	817	02-817	MW	05/14/2001	9.31			3.18
NMCB, UST T-1416-A	NMCB	817	02-817	MW	05/18/2001	9.91			2.58
NMCB, UST T-1416-A	NMCB	817	02-817	MW	05/28/2001	8.95			3.54
NMCB, UST T-1416-A	NMCB	817	02-817	MW	06/08/2001	9.90	Product Not Found	0	2.59
NMCB, UST T-1416-A	NMCB	817	02-817	MW	06/15/2001	10.18	Product Not Found	0	2.31
NMCB, UST T-1416-A	NMCB	817	02-817	MW	06/22/2001	9.56	Product Not Found	0	2.93
NMCB, UST T-1416-A	NMCB	817	02-817	MW	06/25/2001	10.26	Product Not Found	0	2.23
NMCB, UST T-1416-A	NMCB	817	02-817	MW	06/27/2001	9.70	Product Not Found	0	2.79
NMCB, UST T-1416-A	NMCB	817	02-817	MW	07/06/2001	9.92	Product Not Found	0	2.57
NMCB, UST T-1416-A	NMCB	817	02-817	MW	07/13/2001	9.75	Product Not Found	0	2.74
NMCB, UST T-1416-A	NMCB	817	02-817	MW	07/20/2001	10.21	Product Not Found	0	2.28
NMCB, UST T-1416-A	NMCB	817	02-817	MW	07/27/2001	9.96	Product Not Found	0	2.53
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/03/2001	9.89	Product Not Found	0	2.60
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/10/2001	10.07	Product Not Found	0	2.42
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/17/2001	9.98	Product Not Found	0	2.51
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/24/2001	10.32	Product Not Found	0	2.17
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/31/2001	9.95	Product Not Found	0	2.54
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/07/2001	10.15	Product Not Found	0	2.34
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/14/2001	9.99	Product Not Found	0	2.50
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/21/2001	9.86	Product Not Found	0	2.63
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/28/2001	10.22	Product Not Found	0	2.27
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/29/2001	10.17	Product Not Found	0	2.32
NMCB, UST T-1416-A	NMCB	817	02-817	MW	10/05/2001	9.56	Product Not Found	0	2.93
NMCB, UST T-1416-A	NMCB	817	02-817	MW	10/12/2001	9.67	Product Not Found	0	2.82
NMCB, UST T-1416-A	NMCB	817	02-817	MW	10/19/2001	9.56	Product Not Found	0	2.93
NMCB, UST T-1416-A	NMCB	817	02-817	MW	10/26/2001	10.31	Product Not Found	0	2.18
NMCB, UST T-1416-A	NMCB	817	02-817	MW	11/02/2001	9.60	Product Not Found	0	2.89
NMCB, UST T-1416-A	NMCB	817	02-817	MW	11/09/2001	9.62	Product Not Found	0	2.87
NMCB, UST T-1416-A	NMCB	817	02-817	MW	04/01/2002	10.44	Product Not Found	0	2.05
NMCB, UST T-1416-A	NMCB	817	02-817	MW	05/11/2002	10.45	Product Not Found	0	2.04
NMCB, UST T-1416-A	NMCB	817	02-817	MW	05/17/2002	9.52	Product Not Found	0	2.97
NMCB, UST T-1416-A	NMCB	817	02-817	MW	05/24/2002	9.72	Product Not Found	0	2.77
NMCB, UST T-1416-A	NMCB	817	02-817	MW	05/31/2002	9.26	Product Not Found	0	3.23
NMCB, UST T-1416-A	NMCB	817	02-817	MW	06/07/2002	9.83	Product Not Found	0	2.66
NMCB, UST T-1416-A	NMCB	817	02-817	MW	06/14/2002	9.44	Product Not Found	0	3.05
NMCB, UST T-1416-A	NMCB	817	02-817	MW	06/21/2002	10.01	Product Not Found	0	2.48
NMCB, UST T-1416-A	NMCB	817	02-817	MW	06/28/2002	9.40	Product Not Found	0	3.09
NMCB, UST T-1416-A	NMCB	817	02-817	MW	07/05/2002	10.35	Product Not Found	0	2.14
NMCB, UST T-1416-A	NMCB	817	02-817	MW	07/12/2002	9.59	Product Not Found	0	2.90
NMCB, UST T-1416-A	NMCB	817	02-817	MW	07/19/2002	9.91	Product Not Found	0	2.58
NMCB, UST T-1416-A	NMCB	817	02-817	MW	07/26/2002	9.46	Product Not Found	0	3.03

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/02/2002	10.22	Product Not Found	0	2.27
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/09/2002	9.87	Product Not Found	0	2.62
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/16/2002	10.41	Product Not Found	0	2.08
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/23/2002	9.88	Product Not Found	0	2.61
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/30/2002	10.15	Product Not Found	0	2.34
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/06/2002	10.29	Product Not Found	0	2.20
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/13/2002	9.95	Product Not Found	0	2.54
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/20/2002	10.14	Product Not Found	0	2.35
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/27/2002	9.81	Product Not Found	0	2.68
NMCB, UST T-1416-A	NMCB	817	02-817	MW	10/04/2002	10.05	Product Not Found	0	2.44
NMCB, UST T-1416-A	NMCB	817	02-817	MW	10/11/2002	9.43	Product Not Found	0	3.06
NMCB, UST T-1416-A	NMCB	817	02-817	MW	10/18/2002	9.43	Product Not Found	0	3.06
NMCB, UST T-1416-A	NMCB	817	02-817	MW	10/25/2002	9.17	Product Not Found	0	3.32
NMCB, UST T-1416-A	NMCB	817	02-817	MW	11/01/2002	9.21	Product Not Found	0	3.28
NMCB, UST T-1416-A	NMCB	817	02-817	MW	11/08/2002	9.93	Product Not Found	0	2.56
NMCB, UST T-1416-A	NMCB	817	02-817	MW	10/14/2003	9.41	Product Not Found	0	3.08
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/02/2004	10.11	Product Not Found	0	2.38
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/09/2004	9.60	Product Not Found	0	2.89
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/13/2004	8.95	Product Not Found	0	3.54
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/17/2004	8.95	Product Not Found	0	3.54
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/20/2004	9.14	Product Not Found	0	3.35
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/23/2004	9.03	Product Not Found	0	3.46
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/27/2004	9.31	Product Not Found	0	3.18
NMCB, UST T-1416-A	NMCB	817	02-817	MW	08/31/2004	9.79	Product Not Found	0	2.70
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/03/2004	10.31	Product Not Found	0	2.18
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/07/2004	10.33	Product Not Found	0	2.16
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/10/2004	10.02	Product Not Found	0	2.47
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/14/2004	10.21	Product Not Found	0	2.28
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/21/2004	10.37	Product Not Found	0	2.12
NMCB, UST T-1416-A	NMCB	817	02-817	MW	09/27/2004	10.42	Mix Sheen	0.01	2.07
NMCB, UST T-1416-A	NMCB	817	02-817	MW	10/22/2004	9.75	Product Not Found	0	2.74
NMCB, UST T-1416-A	NMCB	817	02-817	MW	11/03/2004	9.40	Product Not Found	0	3.09
NMCB, UST T-1416-A	NMCB	817	02-817	MW	12/03/2004	9.22	Product Not Found	0	3.27
NMCB, UST T-1416-A	NMCB	817	02-817	MW	9/22/2006	10.05	Product Not Found	0	2.44
NMCB, UST T-1416-A	NMCB	817	02-817	MW	9/17/2007	9.28	Product Not Found	0	3.21
NMCB, UST T-1416-A	NMCB	817	02-817	MW	9/24/2008	10.31	Product Not Found	0	2.18
NMCB, UST T-1416-A	NMCB	817	02-817	MW	9/16/2009	9.82	Product Not Found	0	2.67
NMCB, UST T-1416-A	NMCB	817	02-817	MW	9/11/2010	10.33	Product Not Found	0	2.16
NMCB, UST T-1416-A	NMCB	817	02-817	MW	9/7/2011	10.24	Product Not Found	0	2.25
NMCB, UST T-1416-A	NMCB	817	02-817	MW	8/28/2012	10.33	Product Not Found	0	2.16
NMCB, UST T-1416-A	NMCB	817	02-817	MW	8/31/2013	9.95	Product Not Found	0	2.54
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/14/2001	8.36			3.19
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/18/2001	9.14			2.41
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/28/2001	8.92			2.63
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/01/2001	9.17	Product Not Found	0	2.38
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/08/2001	8.96	Product Not Found	0	2.59
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/15/2001	9.75	Mixed Product	0.49	1.80
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/16/2001	9.22	Mix Sheen	0.01	2.33
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/18/2001	9.15	Product Not Found	0	2.40
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/19/2001	9.20	Mix Sheen	0.01	2.35

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/20/2001	9.18			2.37
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/21/2001	8.80	Product Not Found	0	2.75
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/22/2001	8.74	Product Not Found	0	2.81
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/23/2001	8.43	Product Not Found	0	3.12
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/25/2001	9.03	Product Not Found	0	2.52
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/26/2001	8.75	Product Not Found	0	2.80
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/27/2001	8.82	Product Not Found	0	2.73
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/28/2001	9.21	Product Not Found	0	2.34
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/30/2001	9.51	Mix Sheen	0.01	2.04
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/02/2001	9.13	Mix Sheen	0.01	2.42
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/03/2001	9.22	Product Not Found	0	2.33
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/04/2001	9.03	Product Not Found	0	2.52
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/05/2001	9.72	Product Not Found	0	1.83
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/06/2001	9.19	Product Not Found	0	2.36
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/07/2001	8.89	Product Not Found	0	2.66
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/09/2001	9.59	Product Not Found	0	1.96
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/10/2001	9.57	Product Not Found	0	1.98
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/11/2001	9.01	Product Not Found	0	2.54
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/12/2001	9.30	Product Not Found	0	2.25
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/13/2001	8.98	Product Not Found	0	2.57
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/14/2001	8.99	Product Not Found	0	2.56
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/16/2001	9.43	Product Not Found	0	2.12
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/17/2001	9.37	Product Not Found	0	2.18
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/18/2001	9.21	Product Not Found	0	2.34
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/19/2001	9.08	Product Not Found	0	2.47
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/20/2001	9.26	Product Not Found	0	2.29
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/21/2001	8.94	Product Not Found	0	2.61
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/23/2001	9.89	Mix Sheen	0.01	1.66
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/24/2001	9.34	Mixed Product	0.03	2.21
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/25/2001	9.61	Mix Sheen	0.01	1.94
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/26/2001	9.06	Mix Sheen	0.01	2.49
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/27/2001	9.16	Product Not Found	0	2.39
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/28/2001	9.27	Product Not Found	0	2.28
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/30/2001	9.32	Product Not Found	0	2.23
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/31/2001	9.22	Product Not Found	0	2.33
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/01/2001	9.15	Product Not Found	0	2.40
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/02/2001	9.18	Product Not Found	0	2.37
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/03/2001	9.14	Product Not Found	0	2.41
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/04/2001	9.14	Product Not Found	0	2.41
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/06/2001	9.04	Product Not Found	0	2.51
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/07/2001	9.03	Product Not Found	0	2.52
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/08/2001	9.02	Product Not Found	0	2.53
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/09/2001	9.10	Mixed Product	0.02	2.45
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/10/2001	9.44	Mixed Product	0.18	2.11
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/11/2001	10.22	Mixed Product	0.85	1.33
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/13/2001	9.97	Mixed Product	0.52	1.58
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/14/2001	9.44	Product Not Found	0	2.11
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/15/2001	9.45	Product Not Found	0	2.10
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/16/2001	9.32	Product Not Found	0	2.23
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/17/2001	9.16	Product Not Found	0	2.39

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/18/2001	9.06	Product Not Found	0	2.49
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/20/2001	8.89	Product Not Found	0	2.66
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/21/2001	9.06	Product Not Found	0	2.49
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/22/2001	9.07	Product Not Found	0	2.48
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/23/2001	9.72	Mixed Product	0.46	1.83
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/24/2001	10.14	Mixed Product	0.77	1.41
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/25/2001	9.74	Mixed Product	0.23	1.81
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/27/2001	9.51	Product Not Found	0	2.04
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/28/2001	9.27	Product Not Found	0	2.28
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/29/2001	9.11	Product Not Found	0	2.44
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/30/2001	9.15	Product Not Found	0	2.40
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/31/2001	9.19	Product Not Found	0	2.36
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/01/2001	9.12	Product Not Found	0	2.43
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/03/2001	8.85	Product Not Found	0	2.70
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/04/2001	8.93	Product Not Found	0	2.62
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/05/2001	9.45	Mixed Product	0.04	2.10
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/06/2001	9.35	Mixed Product	0.01	2.20
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/07/2001	9.54	Mixed Product	0.22	2.01
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/08/2001	9.52	Mix Sheen	0.01	2.03
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/10/2001	10.02	Mixed Product	0.44	1.53
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/11/2001	9.33	Product Not Found	0	2.22
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/12/2001	9.47	Product Not Found	0	2.08
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/13/2001	9.56	Product Not Found	0	1.99
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/14/2001	9.34	Product Not Found	0	2.21
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/15/2001	9.37	Product Not Found	0	2.18
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/17/2001	9.34	Product Not Found	0	2.21
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/18/2001	9.08	Product Not Found	0	2.47
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/19/2001	8.96	Product Not Found	0	2.59
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/20/2001	8.76	Product Not Found	0	2.79
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/21/2001	8.99	Product Not Found	0	2.56
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/22/2001	8.99	Product Not Found	0	2.56
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/24/2001	9.41	Product Not Found	0	2.14
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/25/2001	9.48	Product Not Found	0	2.07
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/26/2001	8.93	Product Not Found	0	2.62
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/27/2001	9.37	Product Not Found	0	2.18
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/28/2001	9.62	Mixed Product	0.22	1.93
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/29/2001	9.82	Mixed Product	0.29	1.73
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/29/2001	10.17	Product Not Found	0	1.38
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/01/2001	9.11	Mix Sheen	0.01	2.44
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/02/2001	8.86	Mix Sheen	0.01	2.69
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/03/2001	8.77	Mix Sheen	0.01	2.78
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/04/2001	8.76	Mix Sheen	0.01	2.79
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/05/2001	8.64	Product Not Found	0	2.91
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/06/2001	8.77	Product Not Found	0	2.78
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/08/2001	8.46	Product Not Found	0	3.09
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/09/2001	8.81	Product Not Found	0	2.74
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/10/2001	8.83	Product Not Found	0	2.72
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/12/2001	8.82	Mix Sheen	0.01	2.73
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/13/2001	9.32	Product Not Found	0	2.23
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/15/2001	9.16	Product Not Found	0	2.39

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/16/2001	8.69	Product Not Found	0	2.86
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/17/2001	8.64	Product Not Found	0	2.91
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/18/2001	8.58	Product Not Found	0	2.97
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/19/2001	8.66	Product Not Found	0	2.89
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/20/2001	8.77	Product Not Found	0	2.78
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/22/2001	9.02	Product Not Found	0	2.53
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/23/2001	9.41	Product Not Found	0	2.14
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/24/2001	9.66	Product Not Found	0	1.89
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/25/2001	9.45	Mixed Product	0.07	2.10
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/26/2001	9.58	Mixed Product	0.07	1.97
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/27/2001	9.58	Mixed Product	0.04	1.97
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/29/2001	9.04	Product Not Found	0	2.51
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/30/2001	8.64	Mix Sheen	0.01	2.91
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/31/2001	8.67	Product Not Found	0	2.88
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/01/2001	8.74	Product Not Found	0	2.81
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/02/2001	8.82	Product Not Found	0	2.73
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/03/2001	8.96	Product Not Found	0	2.59
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/05/2001	8.57	Product Not Found	0	2.98
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/06/2001	8.59	Product Not Found	0	2.96
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/07/2001	8.54	Product Not Found	0	3.01
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/08/2001	8.85	Product Not Found	0	2.70
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/09/2001	8.85	Mix Sheen	0.01	2.70
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/10/2001	8.64	Product Not Found	0	2.91
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/12/2001	8.82	Product Not Found	0	2.73
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/13/2001	9.03	Product Not Found	0	2.52
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/14/2001	8.86	Product Not Found	0	2.69
NMCB, UST T-1416-A	NMCB	818	02-818	MW	04/01/2002	9.86	Product Not Found	0	1.69
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/11/2002	10.42	Mixed Product	0.97	1.13
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/12/2002	9.52	Mixed Product	0.11	2.03
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/13/2002	8.78	Mix Sheen	0.01	2.77
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/14/2002	8.84	Product Not Found	0	2.71
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/15/2002	9.61	Product Not Found	0	1.94
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/16/2002	9.06	Product Not Found	0	2.49
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/17/2002	8.56	Product Not Found	0	2.99
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/18/2002	8.34	Mix Sheen	0.01	3.21
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/20/2002	9.77	Product Not Found	0	1.78
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/21/2002	8.91	Product Not Found	0	2.64
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/22/2002	8.90	Product Not Found	0	2.65
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/23/2002	9.03	Product Not Found	0	2.52
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/24/2002	8.94	Product Not Found	0	2.61
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/25/2002	9.10	Mix Sheen	0.01	2.45
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/27/2002	7.65	Mix Sheen	0.01	3.90
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/28/2002	8.56	Product Not Found	0	2.99
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/29/2002	8.94	Mix Sheen	0.01	2.61
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/30/2002	8.31	Product Not Found	0	3.24
NMCB, UST T-1416-A	NMCB	818	02-818	MW	05/31/2002	8.38	Mix Sheen	0.01	3.17
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/01/2002	8.43	Mix Sheen	0.01	3.12
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/03/2002	8.85	Mix Sheen	0.01	2.70
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/04/2002	9.05	Product Not Found	0	2.50
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/05/2002	9.12	Product Not Found	0	2.43

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/06/2002	9.08	Product Not Found	0	2.47
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/07/2002	9.11	Product Not Found	0	2.44
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/08/2002	8.94	Mix Sheen	0.01	2.61
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/10/2002	8.08	Product Not Found	0	3.47
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/11/2002	9.12	Product Not Found	0	2.43
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/12/2002	9.72	Product Not Found	0	1.83
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/13/2002	8.68	Product Not Found	0	2.87
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/14/2002	8.56	Product Not Found	0	2.99
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/15/2002	9.01	Product Not Found	0	2.54
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/17/2002	8.67	Product Not Found	0	2.88
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/18/2002	8.83	Mix Sheen	0.01	2.72
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/19/2002	9.14	Product Not Found	0	2.41
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/20/2002	9.36	Product Not Found	0	2.19
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/21/2002	9.28	Product Not Found	0	2.27
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/22/2002	8.97	Product Not Found	0	2.58
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/24/2002	8.87	Product Not Found	0	2.68
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/25/2002	9.65	Product Not Found	0	1.90
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/26/2002	8.46	Product Not Found	0	3.09
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/27/2002	8.46	Product Not Found	0	3.09
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/28/2002	7.53	Product Not Found	0	4.02
NMCB, UST T-1416-A	NMCB	818	02-818	MW	06/29/2002	9.15	Product Not Found	0	2.40
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/01/2002	9.15	Product Not Found	0	2.40
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/02/2002	9.44	Mixed Product	0.04	2.11
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/03/2002	9.74	Mixed Product	0.23	1.81
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/04/2002	9.08	Mix Sheen	0.01	2.47
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/05/2002	9.62	Mixed Product	0.01	1.93
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/06/2002	9.63	Mix Sheen	0.01	1.92
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/08/2002	9.33	Mix Sheen	0.01	2.22
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/09/2002	9.53	Product Not Found	0	2.02
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/10/2002	9.81	Product Not Found	0	1.74
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/11/2002	8.89	Product Not Found	0	2.66
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/12/2002	8.70	Product Not Found	0	2.85
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/13/2002	9.83	Product Not Found	0	1.72
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/15/2002	9.42	Product Not Found	0	2.13
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/16/2002	9.12	Mix Sheen	0.01	2.43
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/17/2002	9.51	Mixed Product	0.29	2.04
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/18/2002	9.41	Mix Sheen	0.01	2.14
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/19/2002	9.11	Mix Sheen	0.01	2.44
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/20/2002	8.93	Product Not Found	0	2.62
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/22/2002	8.65	Mix Sheen	0.01	2.90
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/23/2002	8.52	Product Not Found	0	3.03
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/24/2002	8.83	Mix Sheen	0.01	2.72
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/25/2002	8.34	Mix Sheen	0.01	3.21
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/26/2002	8.65	Product Not Found	0	2.90
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/27/2002	8.73	Product Not Found	0	2.82
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/29/2002	9.19	Mix Sheen	0.01	2.36
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/30/2002	9.32	Mix Sheen	0.01	2.23
NMCB, UST T-1416-A	NMCB	818	02-818	MW	07/31/2002	9.71	Mixed Product	0.34	1.84
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/01/2002	9.66	Mixed Product	0.25	1.89
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/02/2002	9.52	Mix Sheen	0.01	2.03

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/03/2002	9.43	Mix Sheen	0.01	2.12
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/05/2002	9.22	Product Not Found	0	2.33
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/06/2002	9.19	Product Not Found	0	2.36
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/07/2002	9.31	Product Not Found	0	2.24
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/08/2002	9.28	Product Not Found	0	2.27
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/09/2002	9.03	Product Not Found	0	2.52
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/10/2002	8.89	Product Not Found	0	2.66
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/12/2002	8.86	Product Not Found	0	2.69
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/13/2002	9.16	Mixed Product	0.01	2.39
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/14/2002	9.81	Mixed Product	0.44	1.74
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/15/2002	9.91	Mixed Product	0.32	1.64
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/16/2002	9.71	Mix Sheen	0.01	1.84
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/17/2002	9.58	Mix Sheen	0.01	1.97
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/19/2002	9.14	Mix Sheen	0.01	2.41
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/20/2002	8.84	Mix Sheen	0.01	2.71
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/21/2002	8.99	Mix Sheen	0.01	2.56
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/22/2002	8.97	Product Not Found	0	2.58
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/23/2002	9.04	Mix Sheen	0.01	2.51
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/24/2002	9.13	Mix Sheen	0.01	2.42
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/26/2002	9.35	Mix Sheen	0.01	2.20
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/27/2002	9.07	Mix Sheen	0.01	2.48
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/28/2002	9.03	Mix Sheen	0.01	2.52
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/29/2002	9.23	Mix Sheen	0.01	2.32
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/30/2002	9.52	Mixed Product	0.14	2.03
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/31/2002	9.44	Product Not Found	0	2.11
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/02/2002	9.78	Mixed Product	0.18	1.77
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/03/2002	9.14	Product Not Found	0	2.41
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/04/2002	9.23	Mix Sheen	0.01	2.32
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/05/2002	9.27	Product Not Found	0	2.28
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/06/2002	9.60	Mix Sheen	0.01	1.95
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/07/2002	9.25	Mix Sheen	0.01	2.30
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/09/2002	9.43	Mixed Product	0.22	2.12
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/10/2002	10.03	Mixed Product	0.67	1.52
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/11/2002	9.07	Mixed Product	0.01	2.48
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/12/2002	9.11	Mixed Product	0.01	2.44
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/13/2002	9.15	Product Not Found	0	2.40
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/14/2002	9.32	Product Not Found	0	2.23
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/16/2002	9.19	Product Not Found	0	2.36
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/17/2002	9.43	Product Not Found	0	2.12
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/18/2002	9.43	Product Not Found	0	2.12
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/19/2002	9.31	Product Not Found	0	2.24
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/20/2002	9.38	Mix Sheen	0.01	2.17
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/21/2002	9.23	Mixed Product	0.01	2.32
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/23/2002	9.01	Mixed Product	0.01	2.54
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/24/2002	9.00	Mixed Product	0.01	2.55
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/26/2002	8.71	Product Not Found	0	2.84
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/27/2002	9.81	Product Not Found	0	1.74
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/28/2002	9.28	Mix Sheen	0.01	2.27
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/30/2002	9.51	Product Not Found	0	2.04
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/01/2002	9.51	Product Not Found	0	2.04

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/02/2002	9.51	Product Not Found	0	2.04
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/03/2002	9.50	Product Not Found	0	2.05
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/04/2002	9.33	Mix Sheen	0.01	2.22
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/05/2002	9.08	Product Not Found	0	2.47
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/07/2002	9.22	Mixed Product	0.01	2.33
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/08/2002	9.17	Mixed Product	0.01	2.38
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/09/2002	8.55	Mix Sheen	0.01	3.00
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/10/2002	8.67	Product Not Found	0	2.88
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/11/2002	8.62	Product Not Found	0	2.93
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/12/2002	8.90	Product Not Found	0	2.65
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/14/2002	8.76	Product Not Found	0	2.79
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/15/2002	8.92	Product Not Found	0	2.63
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/16/2002	8.66	Product Not Found	0	2.89
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/17/2002	8.66	Product Not Found	0	2.89
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/18/2002	8.67	Product Not Found	0	2.88
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/19/2002	9.42	Mix Sheen	0.01	2.13
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/21/2002	8.29	Product Not Found	0	3.26
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/22/2002	8.41	Product Not Found	0	3.14
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/23/2002	8.30	Product Not Found	0	3.25
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/24/2002	8.21	Product Not Found	0	3.34
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/25/2002	8.28	Product Not Found	0	3.27
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/26/2002	8.66	Product Not Found	0	2.89
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/28/2002	8.39	Product Not Found	0	3.16
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/29/2002	8.55	Product Not Found	0	3.00
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/30/2002	8.51	Product Not Found	0	3.04
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/31/2002	8.42	Product Not Found	0	3.13
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/01/2002	8.37	Product Not Found	0	3.18
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/02/2002	8.75	Product Not Found	0	2.80
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/04/2002	8.38	Product Not Found	0	3.17
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/05/2002	8.04	Product Not Found	0	3.51
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/06/2002	7.61	Product Not Found	0	3.94
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/07/2002	7.72	Product Not Found	0	3.83
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/08/2002	7.97	Product Not Found	0	3.58
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/09/2002	9.37	Product Not Found	0	2.18
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/14/2003	8.54	Product Not Found	0	3.01
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/02/2004	9.43	Product Not Found	0	2.12
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/03/2004	9.53	Product Not Found	0	2.02
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/03/2004	9.66	Product Not Found	0	1.89
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/04/2004	9.03	Product Not Found	0	2.52
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/04/2004	9.01	Product Not Found	0	2.54
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/08/2004	9.56	Product Not Found	0	1.99
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/09/2004	9.59	Product Not Found	0	1.96
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/11/2004	8.75	Product Not Found	0	2.80
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/13/2004	8.74	Product Not Found	0	2.81
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/17/2004	8.71	Product Not Found	0	2.84
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/20/2004	8.81	Product Not Found	0	2.74
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/23/2004	8.91	Mix Sheen	0.01	2.64
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/27/2004	9.25	Product Not Found	0	2.30
NMCB, UST T-1416-A	NMCB	818	02-818	MW	08/31/2004	8.87	Product Not Found	0	2.68
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/03/2004	9.56	Mix Sheen	0.01	1.99

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/07/2004	9.63	Mix Sheen	0.01	1.92
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/10/2004	9.16	Mix Sheen	0.01	2.39
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/14/2004	9.39	Mix Sheen	0.01	2.16
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/21/2004	9.54	Mix Sheen	0.01	2.01
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/27/2004	10.62	Mixed Product	0.01	0.93
NMCB, UST T-1416-A	NMCB	818	02-818	MW	10/22/2004	8.95	Product Not Found	0	2.60
NMCB, UST T-1416-A	NMCB	818	02-818	MW	11/03/2004	8.55	Product Not Found	0	3.00
NMCB, UST T-1416-A	NMCB	818	02-818	MW	12/03/2004	8.50	Product Not Found	0	3.05
NMCB, UST T-1416-A	NMCB	818	02-818	MW	9/22/2006	9.35		0.16	2.20
NMCB, UST T-1416-A	NMCB	818	02-818	MW	9/19/2007	9.12	DRO	0.07	2.43
NMCB, UST T-1416-A	NMCB	818	02-818	MW	9/24/2008	9.56	Product Not Found	0	1.99
NMCB, UST T-1416-A	NMCB	818	02-818	MW	9/15/2009	8.99	DRO	0.01	2.56
NMCB, UST T-1416-A	NMCB	818	02-818	MW	9/10/2010	9.33	DRO	0.66	2.22
NMCB, UST T-1416-A	NMCB	818	02-818	MW	9/7/2011	9.58	Product Not Found	0	1.97
NMCB, UST T-1416-A	NMCB	818	02-818	MW	8/28/2012	9.19	Product Not Found	0.05	2.40
NMCB, UST T-1416-A	NMCB	818	02-818	MW	8/31/2013	8.98	Product Not Found	0	2.57
NMCB, UST T-1416-A	NMCB	819	02-819	MW	04/01/2002	7.68	Product Not Found	0	2.35
NMCB, UST T-1416-A	NMCB	819	02-819	MW	10/14/2003	6.86	Product Not Found	0	3.17
NMCB, UST T-1416-A	NMCB	819	02-819	MW	08/02/2004	8.50	Product Not Found	0	1.53
NMCB, UST T-1416-A	NMCB	819	02-819	MW	08/09/2004	7.55	Product Not Found	0	2.48
NMCB, UST T-1416-A	NMCB	819	02-819	MW	08/13/2004	7.01	Product Not Found	0	3.02
NMCB, UST T-1416-A	NMCB	819	02-819	MW	08/17/2004	7.13	Product Not Found	0	2.90
NMCB, UST T-1416-A	NMCB	819	02-819	MW	08/20/2004	7.20	Product Not Found	0	2.83
NMCB, UST T-1416-A	NMCB	819	02-819	MW	08/23/2004	6.73	Product Not Found	0	3.30
NMCB, UST T-1416-A	NMCB	819	02-819	MW	08/27/2004	7.33	Product Not Found	0	2.70
NMCB, UST T-1416-A	NMCB	819	02-819	MW	08/31/2004	7.23	Product Not Found	0	2.80
NMCB, UST T-1416-A	NMCB	819	02-819	MW	09/03/2004	7.67	Product Not Found	0	2.36
NMCB, UST T-1416-A	NMCB	819	02-819	MW	09/07/2004	7.62	Product Not Found	0	2.41
NMCB, UST T-1416-A	NMCB	819	02-819	MW	09/10/2004	7.38	Mix Sheen	0.01	2.65
NMCB, UST T-1416-A	NMCB	819	02-819	MW	09/14/2004	7.56	Product Not Found	0	2.47
NMCB, UST T-1416-A	NMCB	819	02-819	MW	09/21/2004	7.70	Mix Sheen	0.01	2.33
NMCB, UST T-1416-A	NMCB	819	02-819	MW	09/27/2004	7.75	Mix Sheen	0.01	2.28
NMCB, UST T-1416-A	NMCB	819	02-819	MW	10/22/2004	7.07	Product Not Found	0	2.96
NMCB, UST T-1416-A	NMCB	819	02-819	MW	11/03/2004	6.80	Product Not Found	0	3.23
NMCB, UST T-1416-A	NMCB	819	02-819	MW	12/03/2004	6.47	Product Not Found	0	3.56
NMCB, UST T-1416-A	NMCB	819	02-819	MW	9/15/2006	7.63	Product Not Found	0	2.40
NMCB, UST T-1416-A	NMCB	819	02-819	MW	9/19/2007	6.81	Product Not Found	0	3.22
NMCB, UST T-1416-A	NMCB	819	02-819	MW	9/24/2008	7.64	Product Not Found	0	2.39
NMCB, UST T-1416-A	NMCB	819	02-819	MW	9/16/2009	7.29	Product Not Found	0	2.74
NMCB, UST T-1416-A	NMCB	819	02-819	MW	9/11/2010	7.71	DRO	0.03	2.32
NMCB, UST T-1416-A	NMCB	819	02-819	MW	9/7/2011	7.55	Product Not Found	0	2.48
NMCB, UST T-1416-A	NMCB	819	02-819	MW	8/28/2012	7.67	Product Not Found	0	2.36
NMCB, UST T-1416-A	NMCB	819	02-819	MW	8/31/2013	7.33	Product Not Found	0	2.70
NMCB, UST T-1416-A	NMCB		E-201	MW	9/25/2006	13.54	Product Not Found	0	2.00
NMCB, UST T-1416-A	NMCB		E-201	MW	9/18/2007	12.74	Product Not Found	0	2.80
NMCB, UST T-1416-A	NMCB		E-201	MW	9/24/2008	13.54	Product Not Found	0	2.00
NMCB, UST T-1416-A	NMCB		E-201	MW	9/16/2009	13.28	Product Not Found	0	2.26
NMCB, UST T-1416-A	NMCB		E-201	MW	9/11/2010	13.64	Product Not Found	0	1.90
NMCB, UST T-1416-A	NMCB		E-201	MW	9/7/2011	13.55	Product Not Found	0	1.99
NMCB, UST T-1416-A	NMCB		E-201	MW	8/28/2012	13.55	Product Not Found	0	1.99

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB		E-201	MW	8/31/2013	13.22	Product Not Found	0	2.32
NMCB, UST T-1416-A	NMCB	700	NMCB-01	MW	10/02/2001	17.52	Product Not Found	0	3.21
NMCB, UST T-1416-A	NMCB	700	NMCB-01	MW	11/03/2001	17.44	Product Not Found	0	3.29
NMCB, UST T-1416-A	NMCB	700	NMCB-01	MW	04/01/2002	17.66	Product Not Found	0	3.07
NMCB, UST T-1416-A	NMCB	700	NMCB-01	MW	9/15/2006	18.02	Product Not Found	0	2.71
NMCB, UST T-1416-A	NMCB	700	NMCB-01	MW	9/19/2007	17.23	Product Not Found	0	3.50
NMCB, UST T-1416-A	NMCB	701	NMCB-03	MW	10/02/2001	13.06	Product Not Found	0	2.88
NMCB, UST T-1416-A	NMCB	701	NMCB-03	MW	11/03/2001	12.77	Product Not Found	0	3.17
NMCB, UST T-1416-A	NMCB	701	NMCB-03	MW	04/01/2002	12.79	Product Not Found	0	3.15
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	09/30/2001	12.18	Product Not Found	0	2.31
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	11/03/2001	11.77	Product Not Found	0	2.72
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	04/01/2002	12.00	Product Not Found	0	2.49
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	9/23/2006	13.14		1.17	1.35
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	9/19/2007	11.68	GRO	0.05	2.81
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	9/24/2008	12.31	GRO	0.06	2.18
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	9/15/2009	12.05	GRO	0.01	2.44
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	9/10/2010	12.38	GRO	0.32	2.11
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	9/7/2011	12.28	GRO	Trace	2.21
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	8/28/2012	12.33	Product Not Found	0	2.16
NMCB, UST T-1416-A	NMCB	702	NMCB-04	MW	8/31/2013	11.93	GRO	0.43	2.56
NMCB, UST T-1416-A	NMCB	703	NMCB-05	MW	10/02/2001	5.00	Product Not Found	0	1.31
NMCB, UST T-1416-A	NMCB	703	NMCB-05	MW	11/03/2001	4.62	Product Not Found	0	1.69
NMCB, UST T-1416-A	NMCB	703	NMCB-05	MW	04/01/2002	4.80	Product Not Found	0	1.51
NMCB, UST T-1416-A	NMCB	703	NMCB-05	MW	9/23/2006	4.93		0	1.38
NMCB, UST T-1416-A	NMCB	703	NMCB-05	MW	9/18/2007	4.22	GRO	0.01	2.09
NMCB, UST T-1416-A	NMCB	703	NMCB-05	MW	9/24/2008	4.99	Product Not Found	0	1.32
NMCB, UST T-1416-A	NMCB	703	NMCB-05	MW	9/16/2009	4.75	NA	TRACE	1.56
NMCB, UST T-1416-A	NMCB	703	NMCB-05	MW	9/11/2010	5.04	Product Not Found	TRACE	1.27
NMCB, UST T-1416-A	NMCB	703	NMCB-05	MW	9/7/2011	4.99	Product Not Found	0	1.32
NMCB, UST T-1416-A	NMCB	703	NMCB-05	MW	8/28/2012	4.95	Product Not Found	0	1.36
NMCB, UST T-1416-A	NMCB	704	NMCB-06	MW	10/01/2001	13.17	Product Not Found	0	1.19
NMCB, UST T-1416-A	NMCB	704	NMCB-06	MW	11/03/2001	12.98	Product Not Found	0	1.38
NMCB, UST T-1416-A	NMCB	704	NMCB-06	MW	04/01/2002	13.09	Product Not Found	0	1.27
NMCB, UST T-1416-A	NMCB		NMCB-07	MW	9/25/2006	9.42		0.14	2.43
NMCB, UST T-1416-A	NMCB		NMCB-07	MW	9/19/2007	10.83	GRO	0.31	2.02
NMCB, UST T-1416-A	NMCB		NMCB-07	MW	9/24/2008	9.97	GRO	0.06	1.88
NMCB, UST T-1416-A	NMCB		NMCB-07	MW	9/15/2009	9.26	GRO	0.24	2.59
NMCB, UST T-1416-A	NMCB		NMCB-07	MW	9/11/2010	9.68	GRO	0.56	2.17
NMCB, UST T-1416-A	NMCB		NMCB-07	MW	9/7/2011	10.15	GRO	0.06	1.70
NMCB, UST T-1416-A	NMCB		NMCB-07	MW	8/28/2012	10.26	GRO	0.37	1.59
NMCB, UST T-1416-A	NMCB		NMCB-07	MW	8/31/2013	9.31	GRO	0.36	2.54
NMCB, UST T-1416-A	NMCB		NMCB-08	MW	9/27/2006	5.90	Product Not Found	0	2.62
NMCB, UST T-1416-A	NMCB		NMCB-08	MW	9/17/2007	5.43	Product Not Found	0	3.09
NMCB, UST T-1416-A	NMCB		NMCB-08	MW	9/24/2008	6.04	Product Not Found	0	2.48
NMCB, UST T-1416-A	NMCB		NMCB-08	MW	9/16/2009	6.18	Product Not Found	0	2.34
NMCB, UST T-1416-A	NMCB		NMCB-08	MW	9/11/2010	8.16	Product Not Found	TRACE	0.36
NMCB, UST T-1416-A	NMCB		NMCB-08	MW	9/11/2010	6.70	Product Not Found	0	1.82
NMCB, UST T-1416-A	NMCB		NMCB-08	MW	8/28/2012	9.65	Product Not Found	0	-1.13
NMCB, UST T-1416-A	NMCB		NMCB-08	MW	8/31/2013	5.98	Product Not Found	0	2.54
NMCB, UST T-1416-A	NMCB		NMCB-09	MW	9/25/2006	9.33	Product Not Found	0	2.63

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
NMCB, UST T-1416-A	NMCB		NMCB-09	MW	9/15/2007	9.17	Product Not Found	0	2.79
NMCB, UST T-1416-A	NMCB		NMCB-09	MW	9/24/2008	9.92	Product Not Found	0	2.04
NMCB, UST T-1416-A	NMCB		NMCB-09	MW	9/16/2009	9.54	DRO	0.01	2.42
NMCB, UST T-1416-A	NMCB		NMCB-09	MW	9/10/2010	9.80	DRO	0.01	2.16
NMCB, UST T-1416-A	NMCB		NMCB-09	MW	9/7/2011	9.91	Product Not Found	0	2.05
NMCB, UST T-1416-A	NMCB		NMCB-09	MW	8/28/2012	10.09	Product Not Found	0	1.87
NMCB, UST T-1416-A	NMCB		NMCB-09	MW	8/31/2013	9.67	Product Not Found	0	2.29
NMCB, UST T-1416-A	NMCB		NMCB-10	MW	9/25/2006	10.22	Product Not Found	0	2.73
NMCB, UST T-1416-A	NMCB		NMCB-10	MW	9/17/2007	9.47	DRO	0.01	3.48
NMCB, UST T-1416-A	NMCB		NMCB-10	MW	9/24/2008	10.97	Product Not Found	0	1.98
NMCB, UST T-1416-A	NMCB		NMCB-10	MW	9/16/2009	10.32	DRO	0.02	2.63
NMCB, UST T-1416-A	NMCB		NMCB-10	MW	9/10/2010	10.80	DRO	0.34	2.15
NMCB, UST T-1416-A	NMCB		NMCB-10	MW	9/7/2011	11.04	Product Not Found	0	1.91
NMCB, UST T-1416-A	NMCB		NMCB-10	MW	8/28/2012	11.24	DRO	0.21	1.71
NMCB, UST T-1416-A	NMCB		NMCB-10	MW	8/31/2013	10.46	GRO	0.14	2.49
NMCB, UST T-1416-A	NMCB		NMCB-11	MW	9/25/2006	7.49	Product Not Found	0	4.56
NMCB, UST T-1416-A	NMCB		NMCB-11	MW	9/14/2007	8.94	GRO	0.02	3.11
NMCB, UST T-1416-A	NMCB		NMCB-11	MW	9/24/2008	9.89	Product Not Found	0	2.16
NMCB, UST T-1416-A	NMCB		NMCB-11	MW	9/15/2009	9.09	Product Not Found	0	2.96
NMCB, UST T-1416-A	NMCB		NMCB-11	MW	9/10/2010	9.99	Product Not Found	0	2.06
NMCB, UST T-1416-A	NMCB		NMCB-11	MW	9/7/2011	9.96	Product Not Found	0	2.09
NMCB, UST T-1416-A	NMCB		NMCB-11	MW	8/28/2012	9.87	GRO	0.01	2.18
NMCB, UST T-1416-A	NMCB		NMCB-11	MW	8/31/2013	9.24	GRO	0.03	2.81
NMCB, UST T-1416-A	NMCB		NMCB-12	MW	9/25/2006	13.70	Product Not Found	0	2.57
NMCB, UST T-1416-A	NMCB		NMCB-12	MW	9/14/2007	13.48	Product Not Found	0	2.79
NMCB, UST T-1416-A	NMCB		NMCB-12	MW	9/24/2008	14.41	Product Not Found	0	1.86
NMCB, UST T-1416-A	NMCB		NMCB-12	MW	9/15/2009	13.68	Product Not Found	0	2.59
NMCB, UST T-1416-A	NMCB		NMCB-12	MW	9/10/2010	14.07	Product Not Found	0	2.20
NMCB, UST T-1416-A	NMCB		NMCB-12	MW	9/7/2011	14.35	Product Not Found	0	1.92
NMCB, UST T-1416-A	NMCB		NMCB-12	MW	8/28/2012	14.54	Product Not Found	0	1.73
NMCB, UST T-1416-A	NMCB		NMCB-12	MW	8/31/2013	14.18	Product Not Found	0	2.09
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	06/06/2003	3.53	Product Not Found	0	10.06
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	10/10/2003	3.54	Product Not Found	0	10.05
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	11/03/2003	4.50	Product Not Found	0	9.09
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	09/17/2004	3.79	Unknown Odor	0	9.80
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	9/20/2005	3.29		0	10.30
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	9/13/2006	3.56	Product Not Found	0	10.03
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	9/24/2007	3.64	Product Not Found	0	9.95
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	9/11/2008	3.53	Product Not Found	0	10.06
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	9/1/2009	3.25	Product Not Found	0	10.34
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	9/9/2010	3.30	Product Not Found	0	10.29
ROICC Contactor's Area (UST ROICC-7)	CCAMP	175	08-175	MW	9/7/2012	3.38	Product Not Found	0	10.21
ROICC Contactor's Area (UST ROICC-7)	ROI7	200	08-200	MW	09/23/2001	4.20	Product Not Found	0	10.67
ROICC Contactor's Area (UST ROICC-7)	ROI7	200	08-200	MW	10/10/2002	4.14	Product Not Found	0	10.73
ROICC Contactor's Area (UST ROICC-7)	ROI7	200	08-200	MW	05/14/2003	4.27	Product Not Found	0	10.60
ROICC Contactor's Area (UST ROICC-7)	ROI7	200	08-200	MW	10/10/2003	3.94	Product Not Found	0	10.93
ROICC Contactor's Area (UST ROICC-7)	ROI7	200	08-200	MW	11/03/2003	4.25	Product Not Found	0	10.62
ROICC Contactor's Area (UST ROICC-7)	ROI7	200	08-200	MW	09/17/2004	4.25	Unknown Odor	0	10.62
ROICC Contactor's Area (UST ROICC-7)	ROI7	200	08-200	MW	9/20/2005	4.20		0	10.67
ROICC Contactor's Area (UST ROICC-7)	RO17	200	08-200	MW	9/12/2006	3.93	Product Not Found	0	10.94

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
ROICC Contactor's Area (UST ROICC-7)	RO17	200	08-200	MW	9/24/2007	4.26	Product Not Found	0	10.61
ROICC Contactor's Area (UST ROICC-7)	RO17	200	08-200	MW	9/11/2008	3.97	Product Not Found	0	10.90
ROICC Contactor's Area (UST ROICC-7)	RO17	200	08-200	MW	9/1/2009	3.80	Product Not Found	0	11.07
ROICC Contactor's Area (UST ROICC-7)	RO17	200	08-200	MW	9/9/2010	3.98	Product Not Found	0	10.89
ROICC Contactor's Area (UST ROICC-7)	RO17	200	08-200	MW	9/7/2012	4.08	Product Not Found	0	10.79
ROICC Contactor's Area (UST ROICC-7)	RO17	200	08-200	MW	9/4/2013	4.05	Product Not Found	0	10.82
ROICC Contactor's Area (UST ROICC-7)	ROI7	202	08-202	MW	09/23/2001	2.86	Product Not Found	0	11.00
ROICC Contactor's Area (UST ROICC-7)	ROI7	202	08-202	MW	10/10/2002	2.05	Product Not Found	0	11.81
ROICC Contactor's Area (UST ROICC-7)	ROI7	202	08-202	MW	05/14/2003	2.91	Product Not Found	0	10.95
ROICC Contactor's Area (UST ROICC-7)	ROI7	202	08-202	MW	10/10/2003	2.78	Product Not Found	0	11.08
ROICC Contactor's Area (UST ROICC-7)	ROI7	202	08-202	MW	11/03/2003	2.63	Product Not Found	0	11.23
ROICC Contactor's Area (UST ROICC-7)	ROI7	202	08-202	MW	09/17/2004	2.83	Unknown Odor	0	11.03
ROICC Contactor's Area (UST ROICC-7)	ROI7	202	08-202	MW	9/20/2005	2.77	Product Not Found	0	11.09
ROICC Contactor's Area (UST ROICC-7)	RO17	202	08-202	MW	9/12/2006	2.98	Product Not Found	0	10.88
ROICC Contactor's Area (UST ROICC-7)	RO17	202	08-202	MW	9/24/2007	2.89	Product Not Found	0	10.97
ROICC Contactor's Area (UST ROICC-7)	RO17	202	08-202	MW	9/11/2008	2.74	Product Not Found	0	11.12
ROICC Contactor's Area (UST ROICC-7)	RO17	202	08-202	MW	9/1/2009	2.55	Product Not Found	0	11.31
ROICC Contactor's Area (UST ROICC-7)	RO17	202	08-202	MW	9/9/2010	2.73	Product Not Found	0	11.13
ROICC Contactor's Area (UST ROICC-7)	RO17	202	08-202	MW	9/7/2012	2.74	Product Not Found	0	11.12
ROICC Contactor's Area (UST ROICC-7)	RO17	202	08-202	MW	9/4/2013	2.70	Product Not Found	0	11.16
ROICC CONTRACTORS AREA (UST ROICC-7)	ROI7	160	08-160	MW	09/23/2001	3.24	Product Not Found	0	10.91
ROICC CONTRACTORS AREA (UST ROICC-7)	ROI7	160	08-160	MW	10/11/2002	3.01	Product Not Found	0	11.14
ROICC CONTRACTORS AREA (UST ROICC-7)	ROI7	201	08-201	MW	09/23/2001	3.26	Product Not Found	0	10.70
ROICC CONTRACTORS AREA (UST ROICC-7)	ROI7	201	08-201	MW	10/10/2002	2.92	Product Not Found	0	11.04
ROICC CONTRACTORS AREA (UST ROICC-7)	ROI7	201	08-201	MW	05/14/2003	3.29	Product Not Found	0	10.67
ROICC PAD UST NO. 8	ROI8	153	08-153	MW	09/23/2001	2.71	Product Not Found	0	11.02
ROICC PAD UST NO. 8	ROI8	153	08-153	MW	10/11/2002	2.37	Product Not Found	0	11.36
Runway 5-23 Avgas Valve Pit	16	150	14-100	MW	10/09/2001	2.58	Product Not Found	0	12.48
Runway 5-23 Avgas Valve Pit	16	150	14-100	MW	10/05/2002	3.27	Product Not Found	0	11.79
Runway 5-23 Avgas Valve Pit	16	150	14-100	MW	05/12/2003	3.25	Product Not Found	0	11.81
Runway 5-23 Avgas Valve Pit	16	150	14-100	MW	10/10/2003	4.21	Product Not Found	0	10.85
Runway 5-23 Avgas Valve Pit	16	150	14-100	MW	11/11/2003	2.96	Product Not Found	0	12.10
Runway 5-23 Avgas Valve Pit	16	150	14-100	MW	09/16/2004	3.40	Unknown Odor	0	11.66
Runway 5-23 Avgas Valve Pit	16	150	14-100	MW	09/28/2004	2.72	Unknown Odor	0	12.34
Runway 5-23 Avgas Valve Pit	16	150	14-100	MW	9/22/2005	2.83		0	12.23
Runway 5-23 Avgas Valve Pit	14-100	150	14-100	MW	9/12/2006	3.06	Product Not Found	0	12.00
Runway 5-23 Avgas Valve Pit	14-100	150	14-100	MW	9/25/2007	2.98	Product Not Found	0	12.08
Runway 5-23 Avgas Valve Pit	14-100	150	14-100	MW	9/11/2008	3.10	Product Not Found	0	11.96
Runway 5-23 Avgas Valve Pit	14-100	150	14-100	MW	9/8/2009	2.84	Product Not Found	0	12.22
Runway 5-23 Avgas Valve Pit	14-100	150	14-100	MW	9/3/2010	3.36	Product Not Found	0	11.70
Runway 5-23 Avgas Valve Pit	14-100	150	14-100	MW	9/5/2012	2.56	Product Not Found	0	12.50
Runway 5-23 Avgas Valve Pit	14-100	150	14-100	MW	9/7/2013	2.75	Product Not Found	0	12.31
Runway 5-23 Avgas Valve Pit	TFB	110	14-110	MW	06/06/2003	4.25	Product Not Found	0	10.85
Runway 5-23 Avgas Valve Pit	TFB	110	14-110	MW	10/10/2003	4.90	Product Not Found	0	10.20
Runway 5-23 Avgas Valve Pit	TFB	110	14-110	MW	11/11/2003	2.90	Product Not Found	0	12.20
Runway 5-23 Avgas Valve Pit	TFB	110	14-110	MW	09/16/2004	3.84	Unknown Odor	0	11.26
Runway 5-23 Avgas Valve Pit	TFB	110	14-110	MW	09/25/2004	3.06	Product Not Found	0	12.04
Runway 5-23 Avgas Valve Pit	TFB	110	14-110	MW	9/22/2005	2.92		0	12.18
Runway 5-23 Avgas Valve Pit	14-110	110	14-110	MW	9/12/2006	3.21	Product Not Found	0	11.89
Runway 5-23 Avgas Valve Pit	14-110	110	14-110	MW	9/25/2007	3.24	Product Not Found	0	11.86

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Runway 5-23 Avgas Valve Pit	14-110	110	14-110	MW	9/11/2008	3.40	Product Not Found	0	11.70
Runway 5-23 Avgas Valve Pit	14-110	110	14-110	MW	9/8/2009	2.97	Product Not Found	0	12.13
Runway 5-23 Avgas Valve Pit	14-110	110	14-110	MW	9/3/2010	3.56	Product Not Found	0	11.54
Runway 5-23 Avgas Valve Pit	14-110	110	14-110	MW	9/5/2012	2.78	Product Not Found	0	12.32
SA 78, Old Transportation Building (NSGA)	SA78	116	MW-116	MW	08/04/2002	14.50			30.46
SA 78, Old Transportation Building (NSGA)	SA78	116	MW-116	MW	10/15/2003	14.61	Product Not Found	0	30.35
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	145	12-145	MW	08/05/2002	25.82	Undetermined	0.02	36.39
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	145	12-145	MW	10/15/2003	24.63	Product Not Found	0	37.58
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	145	12-145	MW	9/15/2005	24.18		0	38.03
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-145	145	12-145	MW	9/20/2006	25.23		0.46	36.98
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-145	145	12-145	MW	9/11/2007	21.98	Product Not Found	0	40.23
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-145	145	12-145	MW	9/15/2008	24.88	DRO	0.03	37.00
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-145	145	12-145	MW	9/7/2009	22.77	Product Not Found	0	39.11
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-145	145	12-145	MW	9/7/2010	24.49	Product Not Found	0	37.39
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-145	145	12-145	MW	8/31/2012	24.49	Product Not Found	0	37.39
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	152	12-152	GW	9/15/2005	9.66		0	47.96
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-152	152	12-152	GW	9/19/2006	8.95	Product Not Found	0	48.67
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-152	152	12-152	GW	9/11/2007	8.43	Product Not Found	0	49.19
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	801	12-801	MW	09/24/2001	2.80	Product Not Found	0	32.20
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	801	12-801	MW	10/24/2002	2.48	Product Not Found	0	32.52
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	801	12-801	MW	10/16/2003	3.24	Product Not Found	0	31.76
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	801	12-801	MW	09/24/2004	4.36	Product Not Found	0	30.64
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	801	12-801	MW	9/13/2005	4.62		0	30.38
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-801	801	12-801	MW	9/20/2006	3.31	Product Not Found	0	31.69
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-801	801	12-801	MW	9/15/2008	3.73	Product Not Found	0	31.27
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-801	801	12-801	MW	9/7/2009	2.67	Product Not Found	0	32.33
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-801	801	12-801	MW	9/7/2010	3.25	Product Not Found	0	31.75
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-801	801	12-801	MW	8/31/2012	3.22	Product Not Found	0	31.78
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	802	12-802	MW	09/24/2001	2.60	Product Not Found	0	8.32
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	802	12-802	MW	10/24/2002	1.88	Product Not Found	0	9.04
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	802	12-802	MW	10/16/2003	3.06	Product Not Found	0	7.86
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	802	12-802	MW	09/24/2004	3.92	Product Not Found	0	7.00
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	NSGA	802	12-802	MW	9/13/2005	4.18		0	6.74
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-802	802	12-802	MW	9/20/2006	3.29	Product Not Found	0	7.63
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-802	802	12-802	MW	9/10/2007	1.81	Product Not Found	0	9.11
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-802	802	12-802	MW	9/15/2008	3.17	Product Not Found	0	7.75
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-802	802	12-802	MW	9/7/2009	2.29	DRO	0.01	8.63
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-802	802	12-802	MW	9/7/2010	2.82	Product Not Found	0	8.10
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	12-802	802	12-802	MW	9/31/12	2.84	Product Not Found	0	8.08
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	29	116	MW-116	AW	9/15/2005	14.87		0	
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-116	116	MW-116	AW	9/20/2006	15.07	Product Not Found	0	29.89
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-116	116	MW-116	AW	9/11/2007	12.51	Product Not Found	0	32.45
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-116	116	MW-116	AW	9/7/2009	12.80	Product Not Found	0	32.16
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-116	116	MW-116	AW	9/7/2010	14.40	Product Not Found	0	30.56
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-116	116	MW-116	AW	8/31/2012	14.19	Product Not Found	0	30.77
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	SA78	117	MW-117	MW	08/04/2002	15.80			34.01
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	SA78	117	MW-117	MW	10/15/2003	15.15	Product Not Found	0	34.66
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	SA78	117	MW-117	MW	9/13/2005	14.65		0	35.16
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-117	117	MW-117	MW	9/20/2006	15.64	Product Not Found	0	34.17
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-117	117	MW-117	MW	9/11/2007	9.99	Product Not Found	0	39.82

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-117	117	MW-117	MW	9/15/2008	14.96	Product Not Found	0	34.85
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-117	117	MW-117	MW	9/7/2009	11.67	Product Not Found	0	38.14
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-117	117	MW-117	MW	9/7/2010	14.40	Product Not Found	0	35.41
SA 78, Old Transportation Building (UST 10583, 10584, and ASTs)	MW-117	117	MW-117	MW	8/31/2012	14.25	Product Not Found	0	35.56
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	09/27/2001	10.97	Product Not Found	0	2.72
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	10/17/2002	10.26	Product Not Found	0	3.43
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	10/12/2003	10.26	Product Not Found	0	3.43
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	11/10/2003	10.20	Product Not Found	0	3.49
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	09/21/2004	11.69	Unknown Odor	0	2.00
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	9/15/2005	11.75		0	1.94
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	9/20/2007	11.67	Product Not Found	0	2.02
SA 79, Main Road Pipeline, South End	MDP	230	02-230	MW	9/15/2006	10.62		0	3.07
SA 79, Main Road Pipeline, South End			E-403	MW	8/31/2009	11.80	Product Not Found	0	Unknown
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	9/19/2008	11.67	Product Not Found	0	2.02
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	8/31/2009	12.14	Product Not Found	0	1.55
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	9/3/2010	11.80	Product Not Found	0	1.89
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	9/6/2011	12.17	Product Not Found	0	1.52
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	8/27/2012	12.48	Product Not Found	0	1.21
SA 79, Main Road Pipeline, North and South End	MDP	230	02-230	MW	9/5/2013	11.44	Product Not Found	0	2.25
SA 79, Main Road Pipeline, North and South End			601	MW	9/6/2011	11.19	Product Not Found	0	2.58
SA 79, Main Road Pipeline, North and South End			601	MW	8/27/2012	11.68	Product Not Found	0	2.09
SA 79, Main Road Pipeline, North and South End			601	MW	9/5/2013	11.03	Product Not Found	0	2.74
SA 79, Main Road Pipeline, North and South End			602	MW	9/6/2011	11.13	NA	Trace	2.33
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	09/27/2001	9.99	Product Not Found	0	2.73
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	10/17/2002	9.55	Product Not Found	0	3.17
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	10/12/2003	9.35	Product Not Found	0	3.37
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	11/10/2003	9.40	Product Not Found	0	3.32
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	09/21/2004	10.45	Unknown Odor	0	2.27
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	9/20/2005	10.16		0	2.56
SA 79, Main Road Pipeline, South End	MDP	108	MRP-MW8		9/15/2006	9.80		0	2.92
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	9/20/2007	10.26	Product Not Found	0	2.46
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	9/19/2008	10.26	Product Not Found	0	2.46
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	8/31/2009	10.93	Product Not Found	0	1.79
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	9/3/2010	10.53	Product Not Found	0	2.19
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	9/6/2011	10.70	Product Not Found	0	2.02
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	8/27/2012	11.21	Product Not Found	0	1.51
SA 79, Main Road Pipeline, North and South End	MDP	108	MRP-MW8	MW	9/5/2013	10.11	Product Not Found	0	2.61
SA 79, Main Road Pipeline, South End	MDP	108	NL-01		9/19/2007	4.04	Product Not Found	0	
SA 79, Main Road Pipeline, South End	MDP	108	NL-01		9/23/2008	3.75	Product Not Found	0	
SA 80, Steam Plant 4 (UST 27089 and 27090)	E-RWAY	33	04-103	MW	10/10/2003	21.59	Product Not Found	0	5.14
SA 80, Steam Plant 4 (UST 27089 and 27090)	E-RWAY	33	04-103	MW	11/11/2003	20.43	Product Not Found	0	6.30
SA 80, Steam Plant 4 (UST 27089 and 27090)	E-RWAY	33	04-103	MW	09/22/2004	21.47	Product Not Found	0	5.26
SA 80, Steam Plant 4 (UST 27089 and 27090)	E-RWAY	33	04-103	MW	9/10/2005	21.11		0	5.62
SA 80, Steam Plant 4 (UST 27089 and 27090)	E-RWAY	33	04-103	MW	9/11/2006	21.67	Product Not Found	0	5.06
SA 80, Steam Plant 4 (UST 27089 and 27090)	E-RWAY	33	04-103	MW	9/18/2008	12.42	Product Not Found	0	14.31
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	08/02/2002	15.15	Undetermined	0.05	12.62
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	09/30/2003	19.38	Product Not Found	0	8.39
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	09/12/2004	19.62	Unknown Sheen	0.03	8.15
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	9/10/2005	18.99		0.08	8.78
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	9/12/2006	17.93		0.14	9.84

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	9/18/2008	16.04	DRO	0.1	11.73
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	9/12/2009	15.56	DRO	0.01	12.21
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	9/8/2010	15.62	DRO	0.07	12.15
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	8/31/2011	15.62	DRO	0.09	12.15
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	9/1/2012	15.98	Product Not Found	0	11.79
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	155	04-155	RW	9/4/2013	15.84	DRO	0.21	11.93
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	157	04-157	RW	08/02/2002	20.47			7.71
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	157	04-157	RW	9/12/2006	20.20	Product Not Found	0	7.98
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	157	04-157	RW	9/18/2008	20.28	DRO	0.17	7.90
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	157	04-157	RW	9/12/2009	19.30	DRO	0.03	8.88
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	157	04-157	RW	9/8/2010	20.34	DRO	0.04	7.84
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	157	04-157	RW	8/31/2011	19.20	DRO	0.11	8.98
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	157	04-157	RW	9/1/2012	19.22	DRO	TRACE	8.96
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	157	04-157	RW	9/4/2013	19.50	DRO	0.01	8.68
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	08/02/2002	19.37	Undetermined	0.02	7.99
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	09/30/2003	20.87	Undetermined	0.07	6.49
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	09/12/2004	21.04	Unknown Odor	0.02	6.32
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	9/10/2005	19.11		0	8.25
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	9/11/2006	19.44		0.03	7.92
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	9/11/2007	19.02	DRO	0.03	8.34
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	9/18/2008	19.12	DRO	0.04	8.24
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	9/12/2009	19.19	DRO	0.03	8.17
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	9/8/2010	19.34	Product Not Found	0	8.02
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	8/31/2011	19.33	DRO	0.03	8.03
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	9/1/2012	19.08	Product Not Found	0	8.28
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	158	04-158	MW	9/4/2013	19.71	Product Not Found	0	7.65
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	08/02/2002	23.18			6.68
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	05/08/2003	22.19	Product Not Found	0	7.67
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	09/30/2003	23.98	Product Not Found	0	5.88
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	09/12/2004	23.70	Product Not Found	0	6.16
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	9/9/2005	23.44		0	6.42
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	9/11/2006	23.96	Product Not Found	0	5.90
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	9/12/2007	22.05	Product Not Found	0	7.81
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	9/18/2008	23.67	Product Not Found	0	6.19
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	9/12/2009	23.07	DRO	0.01	6.79
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	9/8/2010	23.48	Product Not Found	0	6.38
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	8/31/2011	23.11	Product Not Found	0	6.75
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	9/1/2012	23.21	Product Not Found	0	6.65
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	159	04-159	MW	9/4/2013	23.55	Product Not Found	0	6.31
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	08/02/2002	21.48			7.03
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	05/08/2003	20.85	Diesel	0.01	7.66
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	09/30/2003	22.61	Product Not Found	0	5.90
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	09/12/2004	22.33	Unknown Odor	0	6.18
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	9/9/2005	22.05		0	6.46
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	9/12/2006	22.61	Product Not Found	0	5.90
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	9/18/2008	22.30	Product Not Found	0	6.21
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	9/12/2009	21.70	DRO	0.01	6.81
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	9/8/2010	22.10	DRO	0.01	6.41
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	8/31/2011	21.73	Product Not Found	0	6.87
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	9/1/2012	21.83	Product Not Found	0	6.68

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	164	04-164	RW	9/4/2013	22.22	Product Not Found	0	6.29
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	08/02/2002	16.10	Undetermined	1	11.36
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	10/20/2003	16.26	Undetermined	0.88	11.20
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	09/12/2004	16.04	Unknown Odor	0.86	11.42
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	09/19/2004	15.62	Unknown Odor	0	11.84
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	9/10/2005	16.15		1.23	11.31
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	9/11/2006	15.97		0.74	11.49
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	9/11/2007	14.45	DRO	0.2	13.01
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	9/18/2008	14.99	DRO	0.38	12.47
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	9/12/2009	14.72	DRO	0.03	12.74
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	9/8/2010	14.98	DRO	0.01	12.48
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	8/31/2011	14.63	DRO	0.02	12.83
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	9/1/2012	14.60	DRO	TRACE	12.86
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	173	04-173	RW	9/4/2013	14.78	Product Not Found	0	12.68
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	10/08/2001	21.10	Product Not Found	0	6.66
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	08/03/2002	21.20			6.56
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	10/14/2002	21.05	Product Not Found	0	6.71
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	05/08/2003	20.34	Product Not Found	0	7.42
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	09/29/2004	21.69	Product Not Found	0	6.07
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	9/10/2005	21.50		0	6.26
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	9/11/2006	22.04	Product Not Found	0	5.72
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	9/12/2007	19.55	Product Not Found	0	8.21
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	9/18/2008	21.77	Product Not Found	0	5.99
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	9/12/2009	21.15	Product Not Found	0	6.61
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	9/8/2010	21.58	Product Not Found	0	6.18
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	8/31/2011	21.21	DRO	0.01	6.55
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	801	04-801	MW	9/1/2012	21.32	Product Not Found	0	6.44
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	08/02/2002	14.45			12.78
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	05/08/2003	13.34	Diesel	0.09	13.89
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	09/30/2003	14.69	Undetermined	0.01	12.54
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	09/12/2004	14.81	Unknown Odor	0.05	12.42
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	9/10/2005	14.49		0.09	12.74
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	9/12/2006	14.84		0.01	12.39
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	9/18/2008	14.45	Product Not Found	0	12.78
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	9/12/2009	14.25	NA	T	12.98
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	9/8/2010	14.63	Product Not Found	0	12.60
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	8/31/2011	14.31	Product Not Found	0	12.92
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	31	SP4-2	MW	9/1/2012	14.34	Product Not Found	0	12.89
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	08/02/2002	20.00			6.70
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	10/10/2003	20.91	Product Not Found	0	5.79
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	10/10/2003	20.91	Product Not Found	0	5.79
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	11/11/2003	20.71	Product Not Found	0	5.99
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	09/12/2004	20.52	Product Not Found	0	6.18
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	09/22/2004	20.65	Unknown Odor	0	6.05
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	9/9/2005	20.24		0	6.46
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	9/11/2006	20.79	Product Not Found	0	5.91
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	9/11/2007	19.05	Product Not Found	0	7.65
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	9/18/2008	20.51	Product Not Found	0	6.19
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	9/12/2009	19.90	DRO	0.01	6.80
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	9/8/2010	20.31	Product Not Found	0	6.39

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	8/31/2011	19.92	Product Not Found	0	6.78
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	9/1/2012	20.03	Product Not Found	0	6.67
SA 80, Steam Plant 4 (UST 27089 and 27090)	SA80	32	SP4-3	MW	9/4/2013	20.40	Product Not Found	0	6.30
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	10/10/2001	13.60	Product Not Found	0	2.99
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	04/01/2002	14.98	Product Not Found	0	1.61
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	10/09/2002	13.78	Product Not Found	0	2.81
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	10/14/2003	13.76	Product Not Found	0	2.83
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/03/2004	14.11	Mixed Product	0.01	2.48
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/03/2004	14.52	Product Not Found	0	2.07
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/04/2004	14.44	Mixed Product	0.21	2.15
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/04/2004	14.50	Mixed Product	0.28	2.09
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/08/2004	15.61	Product Not Found	0	0.98
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/09/2004	14.58	Mix Sheen	0.01	2.01
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/10/2004	14.61	Product Not Found	0	1.98
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/11/2004	14.48	Product Not Found	0	2.11
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/12/2004	14.38	Product Not Found	0	2.21
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/13/2004	14.25	Product Not Found	0	2.34
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/14/2004	14.23	Product Not Found	0	2.36
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/15/2004	14.29	Product Not Found	0	2.30
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/16/2004	14.23	Product Not Found	0	2.36
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/17/2004	14.20	Product Not Found	0	2.39
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/18/2004	14.01	Product Not Found	0	2.58
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/19/2004	14.11	Product Not Found	0	2.48
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/20/2004	14.21			2.38
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/22/2004	14.01	Product Not Found	0	2.58
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/23/2004	14.14	Product Not Found	0	2.45
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/24/2004	14.22	Product Not Found	0	2.37
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/25/2004	14.15	Product Not Found	0	2.44
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/26/2004	14.20	Product Not Found	0	2.39
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/27/2004	14.22	Product Not Found	0	2.37
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/28/2004	14.41	Mix Sheen	0.01	2.18
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/29/2004	14.35	Product Not Found	0	2.24
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/30/2004	14.24	Product Not Found	0	2.35
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	08/31/2004	14.27	Product Not Found	0	2.32
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/01/2004	14.23	Product Not Found	0	2.36
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/02/2004	14.38	Mix Sheen	0.01	2.21
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/03/2004	14.54	Product Not Found	0	2.05
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/04/2004	14.54	Product Not Found	0	2.05
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/05/2004	14.62	Product Not Found	0	1.97
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/06/2004	14.42	Product Not Found	0	2.17
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/07/2004	14.56	Product Not Found	0	2.03
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/08/2004	14.48	Product Not Found	0	2.11
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/09/2004	14.62	Mix Sheen	0.01	1.97
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/10/2004	14.43	Mix Sheen	0.01	2.16
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/11/2004	14.27	Product Not Found	0	2.32
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/12/2004	14.43	Mix Sheen	0.01	2.16
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/13/2004	14.52	Mix Sheen	0.01	2.07
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/14/2004	14.59	Mixed Product	0.01	2.00
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/15/2004	14.64	Product Not Found	0	1.95
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/16/2004	14.43	Unknown Odor	0	2.16

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/16/2004	14.57	Mix Sheen	0.01	2.02
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/17/2004	14.51	Mix Sheen	0.01	2.08
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/18/2004	14.47	Product Not Found	0	2.12
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/19/2004	14.54	Mix Sheen	0.01	2.05
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/20/2004	14.63	Mix Sheen	0.01	1.96
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/21/2004	14.14	Product Not Found	0	2.45
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/22/2004	14.48	Mix Sheen	0.01	2.11
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/23/2004	14.48	Mixed Product	0.02	2.11
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/24/2004	14.68	Mix Sheen	0.01	1.91
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/25/2004	14.32	Mix Sheen	0.01	2.27
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/26/2004	14.54	Mixed Product	0.15	2.05
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/27/2004	14.66	Mixed Product	0.19	1.93
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/28/2004	14.14	Mix Sheen	0.01	2.45
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	09/29/2004	14.14	Mix Sheen	0.01	2.45
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	10/23/2004	13.65	Mixed Product	0.05	2.94
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	10/26/2004	13.71	Mixed Product	0.01	2.88
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	10/29/2004	13.60	Product Not Found	0	2.99
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	11/03/2004	13.73	Mixed Product	0.03	2.86
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	12/02/2004	13.29	Mix Sheen	0.01	3.30
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	9/13/2005	14.26		0	2.33
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	9/19/2006	14.41	Product Not Found	0	2.18
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	9/10/2007	13.65	Product Not Found	0	2.94
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	9/10/2008	14.37	Product Not Found	0	2.22
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	9/12/2009	14.28	Product Not Found	0	2.31
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	9/10/2010	14.58	DRO	0.03	2.01
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	8/31/2011	14.44	Product Not Found	0	2.15
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	8/27/2012	14.59	Product Not Found	0	2.00
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	8/30/2013	14.32	Product Not Found	0	2.27
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	05/14/2001	15.41	Product Not Found	0	3.13
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	05/18/2001	16.60	Product Not Found	0	1.94
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	05/28/2001	15.81			2.73
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	06/01/2001	16.51	Product Not Found	0	2.03
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	06/08/2001	16.49	Product Not Found	0	2.05
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	06/15/2001	16.65	Product Not Found	0	1.89
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	06/22/2001	15.89	Product Not Found	0	2.65
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	06/29/2001	16.87	Product Not Found	0	1.67
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	07/06/2001	16.53	Product Not Found	0	2.01
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	07/13/2001	16.06	Product Not Found	0	2.48
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	07/20/2001	17.08	Product Not Found	0	1.46
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	07/27/2001	16.46	Product Not Found	0	2.08
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/03/2001	16.47	Product Not Found	0	2.07
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/10/2001	16.66	Product Not Found	0	1.88
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/17/2001	16.66	Product Not Found	0	1.88
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/24/2001	16.29	Product Not Found	0	2.25
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/31/2001	16.60	Product Not Found	0	1.94
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/07/2001	16.68	Product Not Found	0	1.86
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/14/2001	16.82	Product Not Found	0	1.72
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/21/2001	16.24	Product Not Found	0	2.30
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/28/2001	16.88	Product Not Found	0	1.66
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/05/2001	15.72	Product Not Found	0	2.82

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/10/2001	15.52	Product Not Found	0	3.02
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/12/2001	15.91	Product Not Found	0	2.63
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/19/2001	15.66	Product Not Found	0	2.88
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/26/2001	16.91	Product Not Found	0	1.63
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	11/02/2001	15.97	Product Not Found	0	2.57
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	11/09/2001	16.15	Product Not Found	0	2.39
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	04/01/2002	17.34	Product Not Found	0	1.20
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	05/11/2002	16.94	Diesel Sheen	0.01	1.60
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	05/17/2002	15.48	Product Not Found	0	3.06
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	05/24/2002	16.55	Product Not Found	0	1.99
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	05/31/2002	15.54	Product Not Found	0	3.00
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	06/07/2002	16.71	Product Not Found	0	1.83
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	06/14/2002	14.74	Product Not Found	0	3.80
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	06/21/2002	16.91	Product Not Found	0	1.63
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	06/28/2002	17.31	Product Not Found	0	1.23
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	07/05/2002	17.11	Product Not Found	0	1.43
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	07/12/2002	15.87	Product Not Found	0	2.67
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	07/19/2002	16.62	Product Not Found	0	1.92
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	07/26/2002	15.96	Product Not Found	0	2.58
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/02/2002	17.27	Product Not Found	0	1.27
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/09/2002	16.37	Product Not Found	0	2.17
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/16/2002	17.34	Product Not Found	0	1.20
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/23/2002	16.49	Product Not Found	0	2.05
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/30/2002	16.84	Product Not Found	0	1.70
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/06/2002	17.11	Product Not Found	0	1.43
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/13/2002	16.41	Product Not Found	0	2.13
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/20/2002	14.79	Product Not Found	0	3.75
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/27/2002	15.91	Product Not Found	0	2.63
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/04/2002	16.82	Product Not Found	0	1.72
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/10/2002	15.61	Product Not Found	0	2.93
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/11/2002	15.68	Product Not Found	0	2.86
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/18/2002	15.95	Product Not Found	0	2.59
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/25/2002	15.32	Product Not Found	0	3.22
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	11/01/2002	16.03	Product Not Found	0	2.51
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	11/08/2002	14.84	Product Not Found	0	3.70
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/14/2003	15.48	Product Not Found	0	3.06
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/03/2004	15.92	Product Not Found	0	2.62
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/03/2004	17.22	Product Not Found	0	1.32
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/04/2004	16.86	Product Not Found	0	1.68
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/04/2004	16.23	Product Not Found	0	2.31
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/08/2004	17.90	Product Not Found	0	0.64
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/13/2004	16.29	Product Not Found	0	2.25
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/17/2004	16.02	Product Not Found	0	2.52
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/20/2004	15.99			2.55
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/23/2004	16.36	Product Not Found	0	2.18
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/27/2004	13.70	Product Not Found	0	4.84
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	08/31/2004	16.11	Product Not Found	0	2.43
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/03/2004	16.82	Product Not Found	0	1.72
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/07/2004	17.11	Product Not Found	0	1.43
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/10/2004	16.71	Mix Sheen	0.01	1.83

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/14/2004	17.03	Mix Sheen	0.01	1.51
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/16/2004	16.55	Unknown Odor	0	1.99
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/21/2004	15.83	Product Not Found	0	2.71
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	09/27/2004	17.03	Product Not Found	0	1.51
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	10/23/2004	15.95	Product Not Found	0	2.59
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	11/03/2004	15.90	Product Not Found	0	2.64
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	12/02/2004	15.36	Product Not Found	0	3.18
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	9/13/2005	16.11		0	2.43
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	9/20/2006	16.72	Product Not Found	0	1.82
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	9/10/2007	16.07	Product Not Found	0	2.47
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	9/10/2008	16.12	Product Not Found	0	2.42
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	9/12/2009	15.07	Product Not Found	0	3.47
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	9/10/2010	16.73	Product Not Found	0	1.81
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	8/31/2011	16.71	Product Not Found	0	1.83
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	8/27/2012	17.40	Product Not Found	0	1.14
South of Runway 18-36 Area	S-RWAY	232	02-232	MW	8/30/2013	16.55	Product Not Found	0	1.99
South of Runway 18-36 Area	S-RWAY	518	02-518	MW	9/15/2006	6.21	Product Not Found	0	1.76
South of Runway 18-36 Area	S-RWAY	518	02-518	MW	9/29/2007	6.86	Product Not Found	0	1.11
South of Runway 18-36 Area	S-RWAY	518	02-518	MW	9/10/2008	6.49	Product Not Found	0	1.48
South of Runway 18-36 Area	S-RWAY	518	02-518	MW	9/12/2009	6.44	DRO	0.01	1.53
South of Runway 18-36 Area	S-RWAY	518	02-518	MW	9/10/2010	6.74	Product Not Found	0	1.23
South of Runway 18-36 Area	S-RWAY	518	02-518	MW	8/31/2011	6.31	Product Not Found	0	1.66
South of Runway 18-36 Area	S-RWAY	518	02-518	MW	8/27/2012	6.46	Product Not Found	0	1.51
South of Runway 18-36 Area	S-RWAY	729	18/36-01	MW	9/15/2006	10.43	Product Not Found	0	1.95
South of Runway 18-36 Area	S-RWAY	729	18/36-01	MW	9/29/2007	10.05	Product Not Found	0	2.33
South of Runway 18-36 Area	S-RWAY	729	18/36-01	MW	9/10/2008	10.38	Product Not Found	0	2.00
South of Runway 18-36 Area	S-RWAY	729	18/36-01	MW	9/12/2009	10.29	NA	T	2.09
South of Runway 18-36 Area	S-RWAY	729	18/36-01	MW	9/10/2010	10.59	Product Not Found	0	1.79
South of Runway 18-36 Area	S-RWAY	729	18/36-01	MW	8/31/2011	10.46	Product Not Found	0	1.92
South of Runway 18-36 Area	S-RWAY	730	18/36-02	MW	9/15/2006	17.46	Product Not Found	0	2.40
South of Runway 18-36 Area	S-RWAY	730	18/36-02	MW	9/29/2007	17.25	Product Not Found	0	2.61
South of Runway 18-36 Area	S-RWAY	730	18/36-02	MW	9/10/2008	17.54	Product Not Found	0	2.32
South of Runway 18-36 Area	S-RWAY	730	18/36-02	MW	9/12/2009	17.34	Product Not Found	0	2.52
South of Runway 18-36 Area	S-RWAY	730	18/36-02	MW	9/10/2010	17.70	Product Not Found	0	2.16
South of Runway 18-36 Area	S-RWAY	730	18/36-02	MW	8/31/2011	17.58	Product Not Found	0	2.28
South of Runway 18-36 Area	S-RWAY	730	18/36-02	MW	8/27/2012	17.79	Product Not Found	0	2.07
South of Runway 18-36 Area	S-RWAY	730	18/36-02	MW	8/30/2013	17.50	Product Not Found	0	2.36
South of Runway 18-36 Area	S-RWAY	731	18/36-03	MW	9/15/2006	6.75	Product Not Found	0	1.37
South of Runway 18-36 Area	S-RWAY	731	18/36-03	MW	9/29/2007	6.50	Product Not Found	0	1.62
South of Runway 18-36 Area	S-RWAY	731	18/36-03	MW	9/10/2008	6.62	Product Not Found	0	1.50
South of Runway 18-36 Area	S-RWAY	731	18/36-03	MW	9/12/2009	6.61	Product Not Found	0	1.51
South of Runway 18-36 Area	S-RWAY	731	18/36-03	MW	9/10/2010	6.83	DRO	0.01	1.29
South of Runway 18-36 Area	S-RWAY	731	18/36-03	MW	8/31/2011	6.76	Product Not Found	0	1.36
South of Runway 18-36 Area	S-RWAY	733	18/36-05	MW	9/20/2006	10.71	Product Not Found	0	2.55
South of Runway 18-36 Area	S-RWAY	733	18/36-05	MW	9/10/2007	9.80	Product Not Found	0	3.46
South of Runway 18-36 Area	S-RWAY	733	18/36-05	MW	9/10/2008	10.79	Product Not Found	0	2.47
South of Runway 18-36 Area	S-RWAY	733	18/36-05	MW	9/12/2009	10.57	Product Not Found	0	2.69
South of Runway 18-36 Area	S-RWAY	733	18/36-05	MW	9/10/2010	10.90	Product Not Found	TRACE	2.36
South of Runway 18-36 Area	S-RWAY	733	18/36-05	MW	8/31/2011	10.73	Product Not Found	0	2.53
South of Runway 18-36 Area	S-RWAY	804	28-804	MW	9/15/2006	5.79	Product Not Found	0	1.21

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	S-RWAY	804	28-804	MW	9/29/2007	well obstructed	NA	NA	NA
South of Runway 18-36 Area	S-RWAY	804	28-804	MW	9/10/2008	3.63	DRO	0.07	1.08
South of Runway 18-36 Area	S-RWAY	804	28-804	MW	9/12/2009	3.35	Product Not Found	0	1.36
South of Runway 18-36 Area	S-RWAY	804	28-804	MW	9/10/2010	3.61	Product Not Found	0	1.10
South of Runway 18-36 Area	S-RWAY	808	28-808	MW	9/15/2006	8.93	Product Not Found	0	-2.09
South of Runway 18-36 Area	S-RWAY	808	28-808	MW	9/28/2007	well obstructed	NA	NA	NA
South of Runway 18-36 Area	S-RWAY	808	28-808	MW	9/10/2008	Not Located	NA	NA	NA
South of Runway 18-36 Area	S-RWAY	812	28-812	MW	9/15/2006	NM	Product Not Found	0	NM
South of Runway 18-36 Area	S-RWAY	746	AS-1	AS	9/19/2006	17.10		0.28	-1.50
South of Runway 18-36 Area	S-RWAY	746	AS-1	AS	9/11/2007	16.21	DRO	0.15	-0.61
South of Runway 18-36 Area	S-RWAY	746	AS-1	AS	9/10/2008	13.17	Product Not Found	0	-1.07
South of Runway 18-36 Area	S-RWAY	746	AS-1	AS	9/12/2009	13.55	Product Not Found	0	-1.45
South of Runway 18-36 Area	S-RWAY	746	AS-1	AS	9/10/2010	13.76	Product Not Found	0	-1.66
South of Runway 18-36 Area	S-RWAY	746	AS-1	AS	8/31/2011	13.75	Product Not Found	0	-1.65
South of Runway 18-36 Area	S-RWAY	746	AS-1	AS	8/27/2012	13.71	Product Not Found	0	-1.61
South of Runway 18-36 Area	S-RWAY	746	AS-1	AS	8/30/2013	13.66	Product Not Found	0	-1.56
South of Runway 18-36 Area	S-RWAY	129	E-206	MW	9/20/2006	10.65	Product Not Found	0	2.41
South of Runway 18-36 Area	S-RWAY	129	E-206	MW	9/8/2007	10.39	Product Not Found	0	2.67
South of Runway 18-36 Area	S-RWAY	129	E-206	MW	9/10/2008	10.69	Product Not Found	0	2.37
South of Runway 18-36 Area	S-RWAY	129	E-206	MW	9/12/2009	10.55	Product Not Found	0	2.51
South of Runway 18-36 Area	S-RWAY	129	E-206	MW	9/10/2010	10.88	Product Not Found	0	2.18
South of Runway 18-36 Area	S-RWAY	129	E-206	MW	8/31/2011	10.72	Product Not Found	0	2.34
South of Runway 18-36 Area	S-RWAY	130	E-207 (AMW-207)	MW	9/15/2006	9.85	Product Not Found	0	2.13
South of Runway 18-36 Area	S-RWAY	130	E-207 (AMW-207)	MW	9/29/2007	12.60	DRO	0.02	-0.62
South of Runway 18-36 Area	S-RWAY	130	E-207 (AMW-207)	MW	9/10/2008	9.80	Product Not Found	0	2.18
South of Runway 18-36 Area	S-RWAY	130	E-207 (AMW-207)	MW	9/12/2009	9.70	Product Not Found	0	2.28
South of Runway 18-36 Area	S-RWAY	130	E-207 (AMW-207)	MW	9/10/2010	10.01	DRO	0.01	1.97
South of Runway 18-36 Area	S-RWAY	130	E-207 (AMW-207)	MW	8/31/2011	0.10	Product Not Found	0	2.11
South of Runway 18-36 Area	S-RWAY	130	E-207 (AMW-207)	MW	8/27/2012	10.04	Product Not Found	0	1.94
South of Runway 18-36 Area	TFA	131	E-208	MW	09/27/2001	6.10	Product Not Found	0	5.10
South of Runway 18-36 Area	TFA	131	E-208	MW	10/10/2001	7.83	Product Not Found	0	3.37
South of Runway 18-36 Area	TFA	131	E-208	MW	04/01/2002	9.60	Product Not Found	0	1.60
South of Runway 18-36 Area	TFA	131	E-208	MW	10/10/2002	7.40	Product Not Found	0	3.80
South of Runway 18-36 Area	TFA	131	E-208	MW	10/14/2003	7.57	Product Not Found	0	3.63
South of Runway 18-36 Area	TFA	131	E-208	MW	09/16/2004	8.89	Product Not Found	0	2.31
South of Runway 18-36 Area	TFA	131	E-208	MW	9/15/2005	8.89		0	2.31
South of Runway 18-36 Area	TFA	131	E-208	MW	9/22/2005	8.00		0	3.20
South of Runway 18-36 Area	TFA	131	E-208	MW	9/21/2006	8.93	Product Not Found	0	2.27
South of Runway 18-36 Area	TFA	131	E-208	MW	9/11/2007	8.22	Product Not Found	0	2.98
South of Runway 18-36 Area	TFA	131	E-208	MW	9/10/2008	8.50	Product Not Found	0	2.70
South of Runway 18-36 Area	TFA	131	E-208	MW	9/12/2009	8.19	Product Not Found	0	3.01
South of Runway 18-36 Area	TFA	131	E-208	MW	9/10/2010	8.88	Product Not Found	0	2.32
South of Runway 18-36 Area	TFA	131	E-208	MW	8/31/2011	8.84	Product Not Found	0	2.36
South of Runway 18-36 Area		132	E-209 (AMW-209)	MW	9/15/2006	6.41	Product Not Found	0	1.75
South of Runway 18-36 Area		132	E-209 (AMW-209)	MW	9/29/2007	6.27	DRO	0.4	1.89
South of Runway 18-36 Area		132	E-209 (AMW-209)	MW	9/10/2008	6.34	Product Not Found	0	1.82
South of Runway 18-36 Area		132	E-209 (AMW-209)	MW	9/12/2009	6.33	Product Not Found	0	1.83
South of Runway 18-36 Area		132	E-209 (AMW-209)	MW	9/10/2010	6.58	Product Not Found	0	1.58
South of Runway 18-36 Area		132	E-209 (AMW-209)	MW	8/31/2011	6.50	Product Not Found	0	1.66
South of Runway 18-36 Area		132	E-209 (AMW-209)	MW	8/27/2012	6.63	Product Not Found	0	1.53

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area		136	E-213 (AMW-213)	MW	9/29/2006	11.30	Product Not Found	0	2.43
South of Runway 18-36 Area		136	E-213 (AMW-213)	MW	9/29/2007	10.67	DRO	0.08	3.06
South of Runway 18-36 Area		136	E-213 (AMW-213)	MW	9/10/2008	11.09	Product Not Found	0	2.64
South of Runway 18-36 Area		136	E-213 (AMW-213)	MW	9/12/2009	16.93	Product Not Found	0	-3.20
South of Runway 18-36 Area		136	E-213 (AMW-213)	MW	9/10/2010	11.26	Product Not Found	0	2.47
South of Runway 18-36 Area		136	E-213 (AMW-213)	MW	8/31/2011	11.12	Product Not Found	0	2.61
South of Runway 18-36 Area		136	E-213 (AMW-213)	MW	8/27/2012	11.28	Product Not Found	0	2.45
South of Runway 18-36 Area		136	E-213 (AMW-213)	MW	8/30/2013	10.90	DRO	0.01	2.83
South of Runway 18-36 Area		138	E-215	MW	9/14/2006	14.29		0.19	2.38
South of Runway 18-36 Area		138	E-215	MW	9/29/2007	13.79	Product Not Found	0	2.88
South of Runway 18-36 Area		138	E-215	MW	9/10/2008	14.14	DRO	0.16	2.53
South of Runway 18-36 Area		138	E-215	MW	9/12/2009	13.93	Product Not Found	0	2.74
South of Runway 18-36 Area		138	E-215	MW	9/10/2010	14.26	DRO	0.29	2.41
South of Runway 18-36 Area		138	E-215	MW	8/31/2011	14.11	Product Not Found	0	2.56
South of Runway 18-36 Area	TFA	139	E-216	MW	05/12/2001	16.01	Product Not Found	0	2.67
South of Runway 18-36 Area	TFA	139	E-216	MW	05/14/2001	15.52	Product Not Found	0	3.16
South of Runway 18-36 Area	TFA	139	E-216	MW	05/18/2001	16.28	Product Not Found	0	2.40
South of Runway 18-36 Area	TFA	139	E-216	MW	05/19/2001	16.45	Diesel	0.03	2.23
South of Runway 18-36 Area	TFA	139	E-216	MW	05/21/2001	17.72	Diesel	0.07	0.96
South of Runway 18-36 Area	TFA	139	E-216	MW	05/22/2001	16.48	Diesel	0.02	2.20
South of Runway 18-36 Area	TFA	139	E-216	MW	05/23/2001	16.32	Diesel	0.27	2.36
South of Runway 18-36 Area	TFA	139	E-216	MW	05/25/2001	16.05	Diesel	0.04	2.63
South of Runway 18-36 Area	TFA	139	E-216	MW	05/26/2001	16.42	Diesel	0.01	2.26
South of Runway 18-36 Area	TFA	139	E-216	MW	05/28/2001	16.24	Diesel	0.18	2.44
South of Runway 18-36 Area	TFA	139	E-216	MW	05/29/2001	15.24	Diesel	0.14	3.44
South of Runway 18-36 Area	TFA	139	E-216	MW	05/30/2001	16.01	Product Not Found	0	2.67
South of Runway 18-36 Area	TFA	139	E-216	MW	05/31/2001	16.22	Diesel	0.01	2.46
South of Runway 18-36 Area	TFA	139	E-216	MW	06/01/2001	16.32	Diesel	0.07	2.36
South of Runway 18-36 Area	TFA	139	E-216	MW	06/02/2001	16.17	Product Not Found	0	2.51
South of Runway 18-36 Area	TFA	139	E-216	MW	06/08/2001	15.95	Diesel Sheen	0.01	2.73
South of Runway 18-36 Area	TFA	139	E-216	MW	06/09/2001	15.78	Product Not Found	0	2.90
South of Runway 18-36 Area	TFA	139	E-216	MW	06/11/2001	15.93	Diesel	0.02	2.75
South of Runway 18-36 Area	TFA	139	E-216	MW	06/12/2001	16.11	Diesel	0.05	2.57
South of Runway 18-36 Area	TFA	139	E-216	MW	06/13/2001	16.26	Diesel	0.06	2.42
South of Runway 18-36 Area	TFA	139	E-216	MW	06/15/2001	17.03	Diesel	0.62	1.65
South of Runway 18-36 Area	TFA	139	E-216	MW	06/16/2001	16.37	Diesel	0.08	2.31
South of Runway 18-36 Area	TFA	139	E-216	MW	06/18/2001	16.22	Product Not Found	0	2.46
South of Runway 18-36 Area	TFA	139	E-216	MW	06/19/2001	16.27	Product Not Found	0	2.41
South of Runway 18-36 Area	TFA	139	E-216	MW	06/20/2001	16.21	Product Not Found	0	2.47
South of Runway 18-36 Area	TFA	139	E-216	MW	06/21/2001	15.82	Product Not Found	0	2.86
South of Runway 18-36 Area	TFA	139	E-216	MW	06/22/2001	15.61	Product Not Found	0	3.07
South of Runway 18-36 Area	TFA	139	E-216	MW	06/23/2001	15.41	Product Not Found	0	3.27
South of Runway 18-36 Area	TFA	139	E-216	MW	06/25/2001	15.91	Product Not Found	0	2.77
South of Runway 18-36 Area	TFA	139	E-216	MW	06/26/2001	15.80	Product Not Found	0	2.88
South of Runway 18-36 Area	TFA	139	E-216	MW	06/27/2001	15.88	Product Not Found	0	2.80
South of Runway 18-36 Area	TFA	139	E-216	MW	06/28/2001	16.25			2.43
South of Runway 18-36 Area	TFA	139	E-216	MW	06/29/2001	16.51	Product Not Found	0	2.17
South of Runway 18-36 Area	TFA	139	E-216	MW	06/30/2001	16.43	Diesel Sheen	0.01	2.25
South of Runway 18-36 Area	TFA	139	E-216	MW	07/02/2001	16.12	Diesel	0.01	2.56
South of Runway 18-36 Area	TFA	139	E-216	MW	07/03/2001	16.11	Diesel Sheen	0.01	2.57

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	TFA	139	E-216	MW	07/04/2001	15.93	Product Not Found	0	2.75
South of Runway 18-36 Area	TFA	139	E-216	MW	07/05/2001	16.41	Product Not Found	0	2.27
South of Runway 18-36 Area	TFA	139	E-216	MW	07/06/2001	16.06	Product Not Found	0	2.62
South of Runway 18-36 Area	TFA	139	E-216	MW	07/07/2001	15.93	Product Not Found	0	2.75
South of Runway 18-36 Area	TFA	139	E-216	MW	07/09/2001	16.45	Diesel	0.03	2.23
South of Runway 18-36 Area	TFA	139	E-216	MW	07/10/2001	16.46	Diesel	0.01	2.22
South of Runway 18-36 Area	TFA	139	E-216	MW	07/11/2001	16.04	Product Not Found	0	2.64
South of Runway 18-36 Area	TFA	139	E-216	MW	07/12/2001	16.24	Diesel	0.03	2.44
South of Runway 18-36 Area	TFA	139	E-216	MW	07/13/2001	16.14	Product Not Found	0	2.54
South of Runway 18-36 Area	TFA	139	E-216	MW	07/16/2001	16.28	Product Not Found	0	2.40
South of Runway 18-36 Area	TFA	139	E-216	MW	07/17/2001	16.17	Product Not Found	0	2.51
South of Runway 18-36 Area	TFA	139	E-216	MW	07/18/2001	16.11	Product Not Found	0	2.57
South of Runway 18-36 Area	TFA	139	E-216	MW	07/19/2001	16.01	Product Not Found	0	2.67
South of Runway 18-36 Area	TFA	139	E-216	MW	07/20/2001	15.27	Product Not Found	0	3.41
South of Runway 18-36 Area	TFA	139	E-216	MW	07/21/2001	15.91	Product Not Found	0	2.77
South of Runway 18-36 Area	TFA	139	E-216	MW	07/23/2001	15.86	Product Not Found	0	2.82
South of Runway 18-36 Area	TFA	139	E-216	MW	07/24/2001	16.02	Product Not Found	0	2.66
South of Runway 18-36 Area	TFA	139	E-216	MW	07/25/2001	16.53	Diesel Sheen	0.01	2.15
South of Runway 18-36 Area	TFA	139	E-216	MW	07/26/2001	16.41	Diesel Sheen	0.01	2.27
South of Runway 18-36 Area	TFA	139	E-216	MW	07/27/2001	16.21	Diesel Sheen	0.01	2.47
South of Runway 18-36 Area	TFA	139	E-216	MW	07/28/2001	16.24	Product Not Found	0	2.44
South of Runway 18-36 Area	TFA	139	E-216	MW	07/30/2001	16.22	Product Not Found	0	2.46
South of Runway 18-36 Area	TFA	139	E-216	MW	07/31/2001	16.15	Product Not Found	0	2.53
South of Runway 18-36 Area	TFA	139	E-216	MW	08/01/2001	16.11	Product Not Found	0	2.57
South of Runway 18-36 Area	TFA	139	E-216	MW	08/02/2001	16.14	Product Not Found	0	2.54
South of Runway 18-36 Area	TFA	139	E-216	MW	08/03/2001	16.06	Product Not Found	0	2.62
South of Runway 18-36 Area	TFA	139	E-216	MW	08/04/2001	16.12	Product Not Found	0	2.56
South of Runway 18-36 Area	TFA	139	E-216	MW	08/06/2001	16.09	Product Not Found	0	2.59
South of Runway 18-36 Area	TFA	139	E-216	MW	08/07/2001	16.13	Product Not Found	0	2.55
South of Runway 18-36 Area	TFA	139	E-216	MW	08/08/2001	16.16	Diesel	0.01	2.52
South of Runway 18-36 Area	TFA	139	E-216	MW	08/09/2001	16.20	Product Not Found	0	2.48
South of Runway 18-36 Area	TFA	139	E-216	MW	08/10/2001	16.97	Diesel	0.59	1.71
South of Runway 18-36 Area	TFA	139	E-216	MW	08/11/2001	17.69	Diesel	1.2	0.99
South of Runway 18-36 Area	TFA	139	E-216	MW	08/13/2001	16.79	Diesel	0.28	1.89
South of Runway 18-36 Area	TFA	139	E-216	MW	08/14/2001	16.53	Diesel	0.09	2.15
South of Runway 18-36 Area	TFA	139	E-216	MW	08/15/2001	16.59	Diesel	0.3	2.09
South of Runway 18-36 Area	TFA	139	E-216	MW	08/16/2001	16.21	Product Not Found	0	2.47
South of Runway 18-36 Area	TFA	139	E-216	MW	08/17/2001	16.09	Diesel	0.01	2.59
South of Runway 18-36 Area	TFA	139	E-216	MW	08/18/2001	16.00	Product Not Found	0	2.68
South of Runway 18-36 Area	TFA	139	E-216	MW	08/20/2001	15.99	Product Not Found	0	2.69
South of Runway 18-36 Area	TFA	139	E-216	MW	08/21/2001	16.11	Diesel	0.01	2.57
South of Runway 18-36 Area	TFA	139	E-216	MW	08/22/2001	16.21	Diesel	0.07	2.47
South of Runway 18-36 Area	TFA	139	E-216	MW	08/23/2001	17.45	Diesel	1.08	1.23
South of Runway 18-36 Area	TFA	139	E-216	MW	08/24/2001	18.06	Diesel	1.59	0.62
South of Runway 18-36 Area	TFA	139	E-216	MW	08/25/2001	16.99	Diesel	0.49	1.69
South of Runway 18-36 Area	TFA	139	E-216	MW	08/27/2001	16.44	Diesel	0.08	2.24
South of Runway 18-36 Area	TFA	139	E-216	MW	08/28/2001	16.17	Product Not Found	0	2.51
South of Runway 18-36 Area	TFA	139	E-216	MW	08/29/2001	16.05	Product Not Found	0	2.63
South of Runway 18-36 Area	TFA	139	E-216	MW	08/30/2001	16.07	Diesel Sheen	0.01	2.61
South of Runway 18-36 Area	TFA	139	E-216	MW	08/31/2001	16.07	Diesel Sheen	0.01	2.61

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	TFA	139	E-216	MW	09/01/2001	16.07	Diesel Sheen	0.01	2.61
South of Runway 18-36 Area	TFA	139	E-216	MW	09/03/2001	16.88	Diesel Sheen	0.01	1.80
South of Runway 18-36 Area	TFA	139	E-216	MW	09/04/2001	15.94	Diesel Sheen	0.01	2.74
South of Runway 18-36 Area	TFA	139	E-216	MW	09/05/2001	16.44	Product Not Found	0	2.24
South of Runway 18-36 Area	TFA	139	E-216	MW	09/06/2001	16.40	Diesel Sheen	0.01	2.28
South of Runway 18-36 Area	TFA	139	E-216	MW	09/07/2001	16.49	Diesel	0.02	2.19
South of Runway 18-36 Area	TFA	139	E-216	MW	09/08/2001	16.55	Diesel	0.01	2.13
South of Runway 18-36 Area	TFA	139	E-216	MW	09/10/2001	16.63	Diesel	0.01	2.05
South of Runway 18-36 Area	TFA	139	E-216	MW	09/11/2001	16.32	Diesel	0.01	2.36
South of Runway 18-36 Area	TFA	139	E-216	MW	09/12/2001	16.34	Product Not Found	0	2.34
South of Runway 18-36 Area	TFA	139	E-216	MW	09/13/2001	16.34	Product Not Found	0	2.34
South of Runway 18-36 Area	TFA	139	E-216	MW	09/14/2001	16.12	Product Not Found	0	2.56
South of Runway 18-36 Area	TFA	139	E-216	MW	09/15/2001	16.16	Product Not Found	0	2.52
South of Runway 18-36 Area	TFA	139	E-216	MW	09/17/2001	16.31	Product Not Found	0	2.37
South of Runway 18-36 Area	TFA	139	E-216	MW	09/18/2001	16.25	Diesel Sheen	0.01	2.43
South of Runway 18-36 Area	TFA	139	E-216	MW	09/19/2001	16.06	Product Not Found	0	2.62
South of Runway 18-36 Area	TFA	139	E-216	MW	09/20/2001	16.91	Diesel Sheen	0.01	1.77
South of Runway 18-36 Area	TFA	139	E-216	MW	09/21/2001	16.13	Product Not Found	0	2.55
South of Runway 18-36 Area	TFA	139	E-216	MW	09/22/2001	16.16	Product Not Found	0	2.52
South of Runway 18-36 Area	TFA	139	E-216	MW	09/24/2001	16.37	Diesel Sheen	0.01	2.31
South of Runway 18-36 Area	TFA	139	E-216	MW	09/25/2001	16.41	Product Not Found	0	2.27
South of Runway 18-36 Area	TFA	139	E-216	MW	09/26/2001	16.05	Product Not Found	0	2.63
South of Runway 18-36 Area	TFA	139	E-216	MW	09/27/2001	16.34	Product Not Found	0	2.34
South of Runway 18-36 Area	TFA	139	E-216	MW	09/28/2001	16.48	Product Not Found	0	2.20
South of Runway 18-36 Area	TFA	139	E-216	MW	09/29/2001	16.51	Diesel Sheen	0.01	2.17
South of Runway 18-36 Area	TFA	139	E-216	MW	10/01/2001	16.14	Diesel Sheen	0.01	2.54
South of Runway 18-36 Area	TFA	139	E-216	MW	10/02/2001	15.94	Product Not Found	0	2.74
South of Runway 18-36 Area	TFA	139	E-216	MW	10/03/2001	15.86	Diesel Sheen	0.01	2.82
South of Runway 18-36 Area	TFA	139	E-216	MW	10/04/2001	15.88	Diesel Sheen	0.01	2.80
South of Runway 18-36 Area	TFA	139	E-216	MW	10/05/2001	15.79	Product Not Found	0	2.89
South of Runway 18-36 Area	TFA	139	E-216	MW	10/06/2001	15.91	Product Not Found	0	2.77
South of Runway 18-36 Area	TFA	139	E-216	MW	10/08/2001	15.64	Product Not Found	0	3.04
South of Runway 18-36 Area	TFA	139	E-216	MW	10/09/2001	15.87	Product Not Found	0	2.81
South of Runway 18-36 Area	TFA	139	E-216	MW	10/10/2001	15.83	Product Not Found	0	2.85
South of Runway 18-36 Area	TFA	139	E-216	MW	10/11/2001	15.99	Diesel Sheen	0.01	2.69
South of Runway 18-36 Area	TFA	139	E-216	MW	10/12/2001	15.87	Product Not Found	0	2.81
South of Runway 18-36 Area	TFA	139	E-216	MW	10/13/2001	16.15	Product Not Found	0	2.53
South of Runway 18-36 Area	TFA	139	E-216	MW	10/15/2001	16.17	Diesel Sheen	0.01	2.51
South of Runway 18-36 Area	TFA	139	E-216	MW	10/16/2001	15.75	Product Not Found	0	2.93
South of Runway 18-36 Area	TFA	139	E-216	MW	10/17/2001	15.71	Product Not Found	0	2.97
South of Runway 18-36 Area	TFA	139	E-216	MW	10/18/2001	15.69	Product Not Found	0	2.99
South of Runway 18-36 Area	TFA	139	E-216	MW	10/19/2001	15.76	Product Not Found	0	2.92
South of Runway 18-36 Area	TFA	139	E-216	MW	10/20/2001	15.86	Product Not Found	0	2.82
South of Runway 18-36 Area	TFA	139	E-216	MW	10/22/2001	16.06	Product Not Found	0	2.62
South of Runway 18-36 Area	TFA	139	E-216	MW	10/23/2001	13.79	Product Not Found	0	4.89
South of Runway 18-36 Area	TFA	139	E-216	MW	10/24/2001	16.57	Diesel	0.01	2.11
South of Runway 18-36 Area	TFA	139	E-216	MW	10/25/2001	17.06	Diesel	0.64	1.62
South of Runway 18-36 Area	TFA	139	E-216	MW	10/26/2001	17.45	Diesel	0.95	1.23
South of Runway 18-36 Area	TFA	139	E-216	MW	10/27/2001	16.88	Diesel	0.3	1.80
South of Runway 18-36 Area	TFA	139	E-216	MW	10/29/2001	16.06	Diesel Sheen	0.01	2.62

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	TFA	139	E-216	MW	10/30/2001	15.78	Product Not Found	0	2.90
South of Runway 18-36 Area	TFA	139	E-216	MW	10/31/2001	15.71	Diesel Sheen	0.01	2.97
South of Runway 18-36 Area	TFA	139	E-216	MW	11/01/2001	15.83	Diesel Sheen	0.01	2.85
South of Runway 18-36 Area	TFA	139	E-216	MW	11/02/2001	15.86	Product Not Found	0	2.82
South of Runway 18-36 Area	TFA	139	E-216	MW	11/03/2001	16.14	Diesel Sheen	0.01	2.54
South of Runway 18-36 Area	TFA	139	E-216	MW	11/05/2001	15.68	Product Not Found	0	3.00
South of Runway 18-36 Area	TFA	139	E-216	MW	11/06/2001	15.64	Product Not Found	0	3.04
South of Runway 18-36 Area	TFA	139	E-216	MW	11/07/2001	15.63	Product Not Found	0	3.05
South of Runway 18-36 Area	TFA	139	E-216	MW	11/08/2001	15.86	Product Not Found	0	2.82
South of Runway 18-36 Area	TFA	139	E-216	MW	11/09/2001	16.90	Diesel Sheen	0.01	1.78
South of Runway 18-36 Area	TFA	139	E-216	MW	11/10/2001	15.77	Product Not Found	0	2.91
South of Runway 18-36 Area	TFA	139	E-216	MW	11/12/2001	16.22	Diesel	0.36	2.46
South of Runway 18-36 Area	TFA	139	E-216	MW	11/13/2001	16.44	Diesel	0.32	2.24
South of Runway 18-36 Area	TFA	139	E-216	MW	11/14/2001	15.03	Diesel	0.01	3.65
South of Runway 18-36 Area	TFA	139	E-216	MW	04/01/2002	17.46	Product Not Found	0	1.22
South of Runway 18-36 Area	TFA	139	E-216	MW	05/11/2002	18.55	Diesel	2.15	0.13
South of Runway 18-36 Area	TFA	139	E-216	MW	05/12/2002	16.24	Diesel	0.11	2.44
South of Runway 18-36 Area	TFA	139	E-216	MW	05/13/2002	15.91	Product Not Found	0	2.77
South of Runway 18-36 Area	TFA	139	E-216	MW	05/14/2002	15.91	Diesel Sheen	0.01	2.77
South of Runway 18-36 Area	TFA	139	E-216	MW	05/15/2002	16.41	Diesel	0.01	2.27
South of Runway 18-36 Area	TFA	139	E-216	MW	05/16/2002	16.07	Diesel	0.01	2.61
South of Runway 18-36 Area	TFA	139	E-216	MW	05/17/2002	15.76	Product Not Found	0	2.92
South of Runway 18-36 Area	TFA	139	E-216	MW	05/18/2002	15.48	Product Not Found	0	3.20
South of Runway 18-36 Area	TFA	139	E-216	MW	05/20/2002	15.02	Diesel Sheen	0.01	3.66
South of Runway 18-36 Area	TFA	139	E-216	MW	05/21/2002	16.00	Diesel	0	2.68
South of Runway 18-36 Area	TFA	139	E-216	MW	05/22/2002	15.94	Diesel Sheen	0.01	2.74
South of Runway 18-36 Area	TFA	139	E-216	MW	05/23/2002	16.04	Diesel Sheen	0.01	2.64
South of Runway 18-36 Area	TFA	139	E-216	MW	05/24/2002	15.99	Diesel Sheen	0.01	2.69
South of Runway 18-36 Area	TFA	139	E-216	MW	05/25/2002	16.07	Diesel	0.01	2.61
South of Runway 18-36 Area	TFA	139	E-216	MW	05/27/2002	15.96	Product Not Found	0	2.72
South of Runway 18-36 Area	TFA	139	E-216	MW	05/28/2002	15.58	Product Not Found	0	3.10
South of Runway 18-36 Area	TFA	139	E-216	MW	05/29/2002	15.87	Product Not Found	0	2.81
South of Runway 18-36 Area	TFA	139	E-216	MW	05/30/2002	15.44	Product Not Found	0	3.24
South of Runway 18-36 Area	TFA	139	E-216	MW	05/31/2002	15.44	Product Not Found	0	3.24
South of Runway 18-36 Area	TFA	139	E-216	MW	06/01/2002	15.55	Product Not Found	0	3.13
South of Runway 18-36 Area	TFA	139	E-216	MW	06/03/2002	15.95	Product Not Found	0	2.73
South of Runway 18-36 Area	TFA	139	E-216	MW	06/04/2002	16.16	Diesel	0.01	2.52
South of Runway 18-36 Area	TFA	139	E-216	MW	06/05/2002	16.34	Diesel	0.11	2.34
South of Runway 18-36 Area	TFA	139	E-216	MW	06/06/2002	16.27	Diesel	0.11	2.41
South of Runway 18-36 Area	TFA	139	E-216	MW	06/07/2002	16.21	Diesel Sheen	0.01	2.47
South of Runway 18-36 Area	TFA	139	E-216	MW	06/08/2002	16.08	Diesel Sheen	0.01	2.60
South of Runway 18-36 Area	TFA	139	E-216	MW	06/10/2002	16.13	Diesel Sheen	0.01	2.55
South of Runway 18-36 Area	TFA	139	E-216	MW	06/11/2002	16.24	Diesel	0.1	2.44
South of Runway 18-36 Area	TFA	139	E-216	MW	06/12/2002	16.65	Diesel	0.11	2.03
South of Runway 18-36 Area	TFA	139	E-216	MW	06/13/2002	15.84	Diesel Sheen	0.01	2.84
South of Runway 18-36 Area	TFA	139	E-216	MW	06/14/2002	15.71	Product Not Found	0	2.97
South of Runway 18-36 Area	TFA	139	E-216	MW	06/15/2002	15.63	Product Not Found	0	3.05
South of Runway 18-36 Area	TFA	139	E-216	MW	06/17/2002	15.81	Diesel Sheen	0.01	2.87
South of Runway 18-36 Area	TFA	139	E-216	MW	06/18/2002	16.01	Diesel	0.05	2.67
South of Runway 18-36 Area	TFA	139	E-216	MW	06/19/2002	16.34	Diesel	0.09	2.34

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	TFA	139	E-216	MW	06/20/2002	16.48	Diesel	0.11	2.20
South of Runway 18-36 Area	TFA	139	E-216	MW	06/21/2002	16.31	Diesel Sheen	0.01	2.37
South of Runway 18-36 Area	TFA	139	E-216	MW	06/22/2002	16.02	Diesel Sheen	0.01	2.66
South of Runway 18-36 Area	TFA	139	E-216	MW	06/24/2002	15.94	Product Not Found	0	2.74
South of Runway 18-36 Area	TFA	139	E-216	MW	06/25/2002	15.67	Product Not Found	0	3.01
South of Runway 18-36 Area	TFA	139	E-216	MW	06/26/2002	15.54	Product Not Found	0	3.14
South of Runway 18-36 Area	TFA	139	E-216	MW	06/27/2002	15.52	Product Not Found	0	3.16
South of Runway 18-36 Area	TFA	139	E-216	MW	06/28/2002	15.56	Product Not Found	0	3.12
South of Runway 18-36 Area	TFA	139	E-216	MW	06/29/2002	16.07	Diesel Sheen	0.01	2.61
South of Runway 18-36 Area	TFA	139	E-216	MW	07/01/2002	16.22	Diesel Sheen	0.01	2.46
South of Runway 18-36 Area	TFA	139	E-216	MW	07/02/2002	17.30	Diesel	0.85	1.38
South of Runway 18-36 Area	TFA	139	E-216	MW	07/03/2002	17.48	Diesel	0.96	1.20
South of Runway 18-36 Area	TFA	139	E-216	MW	07/04/2002	17.89	Diesel	1.28	0.79
South of Runway 18-36 Area	TFA	139	E-216	MW	07/05/2002	16.81	Diesel	0.3	1.87
South of Runway 18-36 Area	TFA	139	E-216	MW	07/06/2002	17.03	Diesel	0.5	1.65
South of Runway 18-36 Area	TFA	139	E-216	MW	07/08/2002	16.36	Diesel	0.07	2.32
South of Runway 18-36 Area	TFA	139	E-216	MW	07/09/2002	16.40	Diesel	0.03	2.28
South of Runway 18-36 Area	TFA	139	E-216	MW	07/10/2002	16.53	Diesel Sheen	0.01	2.15
South of Runway 18-36 Area	TFA	139	E-216	MW	07/11/2002	15.91	Diesel	0.03	2.77
South of Runway 18-36 Area	TFA	139	E-216	MW	07/12/2002	15.69	Diesel Sheen	0.01	2.99
South of Runway 18-36 Area	TFA	139	E-216	MW	07/13/2002	16.13	Diesel Sheen	0.01	2.55
South of Runway 18-36 Area	TFA	139	E-216	MW	07/15/2002	16.32	Diesel Sheen	0.01	2.36
South of Runway 18-36 Area	TFA	139	E-216	MW	07/16/2002	16.21	Diesel Sheen	0.01	2.47
South of Runway 18-36 Area	TFA	139	E-216	MW	07/17/2002	16.59	Diesel	0.24	2.09
South of Runway 18-36 Area	TFA	139	E-216	MW	07/18/2002	16.88	Diesel	0.43	1.80
South of Runway 18-36 Area	TFA	139	E-216	MW	07/19/2002	16.11	Diesel Sheen	0.01	2.57
South of Runway 18-36 Area	TFA	139	E-216	MW	07/20/2002	15.93	Diesel Sheen	0.01	2.75
South of Runway 18-36 Area	TFA	139	E-216	MW	07/22/2002	15.61	Product Not Found	0	3.07
South of Runway 18-36 Area	TFA	139	E-216	MW	07/23/2002	15.51	Product Not Found	0	3.17
South of Runway 18-36 Area	TFA	139	E-216	MW	07/24/2002	15.75	Product Not Found	0	2.93
South of Runway 18-36 Area	TFA	139	E-216	MW	07/25/2002	15.33	Product Not Found	0	3.35
South of Runway 18-36 Area	TFA	139	E-216	MW	07/26/2002	15.63	Diesel Sheen	0.01	3.05
South of Runway 18-36 Area	TFA	139	E-216	MW	07/27/2002	15.81	Product Not Found	0	2.87
South of Runway 18-36 Area	TFA	139	E-216	MW	07/29/2002	16.33	Diesel	0.04	2.35
South of Runway 18-36 Area	TFA	139	E-216	MW	07/30/2002	17.10	Diesel	0.69	1.58
South of Runway 18-36 Area	TFA	139	E-216	MW	07/31/2002	17.75	Diesel	1.29	0.93
South of Runway 18-36 Area	TFA	139	E-216	MW	08/01/2002	17.07	Diesel	0.56	1.61
South of Runway 18-36 Area	TFA	139	E-216	MW	08/02/2002	17.51	Diesel	0.89	1.17
South of Runway 18-36 Area	TFA	139	E-216	MW	08/03/2002	16.54	Diesel	0.01	2.14
South of Runway 18-36 Area	TFA	139	E-216	MW	08/05/2002	16.21	Diesel Sheen	0.01	2.47
South of Runway 18-36 Area	TFA	139	E-216	MW	08/06/2002	16.18	Diesel Sheen	0.01	2.50
South of Runway 18-36 Area	TFA	139	E-216	MW	08/07/2002	16.21	Product Not Found	0	2.47
South of Runway 18-36 Area	TFA	139	E-216	MW	08/08/2002	16.21	Diesel Sheen	0.01	2.47
South of Runway 18-36 Area	TFA	139	E-216	MW	08/09/2002	16.02	Diesel Sheen	0.01	2.66
South of Runway 18-36 Area	TFA	139	E-216	MW	08/10/2002	15.93	Diesel Sheen	0.01	2.75
South of Runway 18-36 Area	TFA	139	E-216	MW	08/12/2002	16.01	Diesel Sheen	0.01	2.67
South of Runway 18-36 Area	TFA	139	E-216	MW	08/13/2002	16.36	Diesel Sheen	0.01	2.32
South of Runway 18-36 Area	TFA	139	E-216	MW	08/14/2002	17.52	Diesel	0.96	1.16
South of Runway 18-36 Area	TFA	139	E-216	MW	08/15/2002	17.56	Diesel	0.95	1.12
South of Runway 18-36 Area	TFA	139	E-216	MW	08/16/2002	17.38	Diesel	0.72	1.30

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	TFA	139	E-216	MW	08/17/2002	16.58	Diesel	0.04	2.10
South of Runway 18-36 Area	TFA	139	E-216	MW	08/19/2002	16.13	Diesel Sheen	0.01	2.55
South of Runway 18-36 Area	TFA	139	E-216	MW	08/20/2002	15.86	Product Not Found	0	2.82
South of Runway 18-36 Area	TFA	139	E-216	MW	08/21/2002	15.97	Diesel Sheen	0.01	2.71
South of Runway 18-36 Area	TFA	139	E-216	MW	08/22/2002	15.98	Product Not Found	0	2.70
South of Runway 18-36 Area	TFA	139	E-216	MW	08/23/2002	16.07	Diesel Sheen	0.01	2.61
South of Runway 18-36 Area	TFA	139	E-216	MW	08/24/2002	16.12	Diesel Sheen	0.01	2.56
South of Runway 18-36 Area	TFA	139	E-216	MW	08/26/2002	16.42	Diesel	0.01	2.26
South of Runway 18-36 Area	TFA	139	E-216	MW	08/27/2002	16.23	Diesel Sheen	0.01	2.45
South of Runway 18-36 Area	TFA	139	E-216	MW	08/28/2002	16.16	Diesel Sheen	0.01	2.52
South of Runway 18-36 Area	TFA	139	E-216	MW	08/29/2002	16.31	Diesel	0.01	2.37
South of Runway 18-36 Area	TFA	139	E-216	MW	08/30/2002	16.47	Diesel	0.01	2.21
South of Runway 18-36 Area	TFA	139	E-216	MW	08/31/2002	16.44	Diesel	0.01	2.24
South of Runway 18-36 Area	TFA	139	E-216	MW	09/02/2002	16.75	Diesel	0.2	1.93
South of Runway 18-36 Area	TFA	139	E-216	MW	09/03/2002	16.51	Diesel	0.25	2.17
South of Runway 18-36 Area	TFA	139	E-216	MW	09/04/2002	16.26	Diesel	0.01	2.42
South of Runway 18-36 Area	TFA	139	E-216	MW	09/05/2002	16.16	Diesel	0.01	2.52
South of Runway 18-36 Area	TFA	139	E-216	MW	09/06/2002	16.47	Diesel	0.02	2.21
South of Runway 18-36 Area	TFA	139	E-216	MW	09/07/2002	16.30	Diesel	0.09	2.38
South of Runway 18-36 Area	TFA	139	E-216	MW	09/09/2002	16.63	Diesel	0.31	2.05
South of Runway 18-36 Area	TFA	139	E-216	MW	09/10/2002	17.18	Diesel	0.82	1.50
South of Runway 18-36 Area	TFA	139	E-216	MW	09/11/2002	10.35	Diesel	0.18	8.33
South of Runway 18-36 Area	TFA	139	E-216	MW	09/12/2002	16.26	Diesel	0.03	2.42
South of Runway 18-36 Area	TFA	139	E-216	MW	09/13/2002	16.16	Diesel	0.01	2.52
South of Runway 18-36 Area	TFA	139	E-216	MW	09/14/2002	16.18	Diesel	0.01	2.50
South of Runway 18-36 Area	TFA	139	E-216	MW	09/16/2002	16.06	Diesel	0.01	2.62
South of Runway 18-36 Area	TFA	139	E-216	MW	09/17/2002	16.23	Diesel	0.02	2.45
South of Runway 18-36 Area	TFA	139	E-216	MW	09/18/2002	10.25	Diesel	0.01	8.43
South of Runway 18-36 Area	TFA	139	E-216	MW	09/19/2002	16.23	Diesel	0.03	2.45
South of Runway 18-36 Area	TFA	139	E-216	MW	09/20/2002	16.41	Diesel	0.08	2.27
South of Runway 18-36 Area	TFA	139	E-216	MW	09/21/2002	16.29	Diesel	0.1	2.39
South of Runway 18-36 Area	TFA	139	E-216	MW	09/23/2002	16.07	Diesel	0.03	2.61
South of Runway 18-36 Area	TFA	139	E-216	MW	09/24/2002	16.14	Diesel	0.03	2.54
South of Runway 18-36 Area	TFA	139	E-216	MW	09/25/2002	15.60	Diesel	0.01	3.08
South of Runway 18-36 Area	TFA	139	E-216	MW	09/26/2002	15.79	Diesel Sheen	0.01	2.89
South of Runway 18-36 Area	TFA	139	E-216	MW	09/27/2002	15.89	Diesel	0.01	2.79
South of Runway 18-36 Area	TFA	139	E-216	MW	09/28/2002	16.26	Diesel	0.03	2.42
South of Runway 18-36 Area	TFA	139	E-216	MW	09/30/2002	16.31	Diesel	0.01	2.37
South of Runway 18-36 Area	TFA	139	E-216	MW	10/01/2002	17.36	Diesel	0.01	1.32
South of Runway 18-36 Area	TFA	139	E-216	MW	10/02/2002	16.32	Diesel	0.01	2.36
South of Runway 18-36 Area	TFA	139	E-216	MW	10/03/2002	16.31	Diesel	0.01	2.37
South of Runway 18-36 Area	TFA	139	E-216	MW	10/04/2002	16.24	Diesel	0.01	2.44
South of Runway 18-36 Area	TFA	139	E-216	MW	10/05/2002	16.07	Diesel	0.02	2.61
South of Runway 18-36 Area	TFA	139	E-216	MW	10/07/2002	16.28	Diesel	0.04	2.40
South of Runway 18-36 Area	TFA	139	E-216	MW	10/08/2002	16.36	Diesel	0.11	2.32
South of Runway 18-36 Area	TFA	139	E-216	MW	10/09/2002	15.74	Mixed Product	0.02	2.94
South of Runway 18-36 Area	TFA	139	E-216	MW	10/10/2002	16.75	Product Not Found	0	1.93
South of Runway 18-36 Area	TFA	139	E-216	MW	10/11/2002	15.70	Diesel Sheen	0.01	2.98
South of Runway 18-36 Area	TFA	139	E-216	MW	10/12/2002	15.76	Diesel Sheen	0.01	2.92
South of Runway 18-36 Area	TFA	139	E-216	MW	10/14/2002	15.63	Diesel Sheen	0.01	3.05

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	TFA	139	E-216	MW	10/15/2002	15.90	Diesel	0.01	2.78
South of Runway 18-36 Area	TFA	139	E-216	MW	10/16/2002	15.74	Diesel	0.01	2.94
South of Runway 18-36 Area	TFA	139	E-216	MW	10/17/2002	15.76	Diesel	0.03	2.92
South of Runway 18-36 Area	TFA	139	E-216	MW	10/18/2002	15.65	Diesel	0.03	3.03
South of Runway 18-36 Area	TFA	139	E-216	MW	10/19/2002	15.47	Diesel	0.04	3.21
South of Runway 18-36 Area	TFA	139	E-216	MW	10/21/2002	15.41	Diesel	0.08	3.27
South of Runway 18-36 Area	TFA	139	E-216	MW	10/22/2002	15.50	Diesel	0.04	3.18
South of Runway 18-36 Area	TFA	139	E-216	MW	10/23/2002	15.43	Diesel	0.05	3.25
South of Runway 18-36 Area	TFA	139	E-216	MW	10/24/2002	15.47	Diesel Sheen	0.01	3.21
South of Runway 18-36 Area	TFA	139	E-216	MW	10/25/2002	15.56	Diesel	0.11	3.12
South of Runway 18-36 Area	TFA	139	E-216	MW	10/25/2002	15.27	Diesel	0.1	3.41
South of Runway 18-36 Area	TFA	139	E-216	MW	10/26/2002	15.43	Diesel	0.01	3.25
South of Runway 18-36 Area	TFA	139	E-216	MW	10/28/2002	15.50	Diesel	0.01	3.18
South of Runway 18-36 Area	TFA	139	E-216	MW	10/29/2002	15.84	Diesel	0.02	2.84
South of Runway 18-36 Area	TFA	139	E-216	MW	10/30/2002	15.81	Diesel	0.05	2.87
South of Runway 18-36 Area	TFA	139	E-216	MW	10/31/2002	15.51	Diesel	0.01	3.17
South of Runway 18-36 Area	TFA	139	E-216	MW	11/01/2002	15.93	Diesel	0.24	2.75
South of Runway 18-36 Area	TFA	139	E-216	MW	11/02/2002	15.87	Diesel	0.07	2.81
South of Runway 18-36 Area	TFA	139	E-216	MW	11/04/2002	15.51	Diesel Sheen	0.01	3.17
South of Runway 18-36 Area	TFA	139	E-216	MW	11/05/2002	15.21	Diesel	0.01	3.47
South of Runway 18-36 Area	TFA	139	E-216	MW	11/06/2002	14.89	Mix Sheen	0	3.79
South of Runway 18-36 Area	TFA	139	E-216	MW	11/07/2002	14.90	Diesel Sheen	0.01	3.78
South of Runway 18-36 Area	TFA	139	E-216	MW	11/08/2002	15.05	Product Not Found	0	3.63
South of Runway 18-36 Area	TFA	139	E-216	MW	11/09/2002	15.34	Product Not Found	0	3.34
South of Runway 18-36 Area	TFA	139	E-216	MW	10/14/2003	15.43	Product Not Found	0	3.25
South of Runway 18-36 Area	TFA	139	E-216	MW	08/03/2004	16.48	Product Not Found	0	2.20
South of Runway 18-36 Area	TFA	139	E-216	MW	08/03/2004	15.92	Product Not Found	0	2.76
South of Runway 18-36 Area	TFA	139	E-216	MW	08/04/2004	16.15	Product Not Found	0	2.53
South of Runway 18-36 Area	TFA	139	E-216	MW	08/04/2004	16.31	Product Not Found	0	2.37
South of Runway 18-36 Area	TFA	139	E-216	MW	08/08/2004	16.38	Product Not Found	0	2.30
South of Runway 18-36 Area	TFA	139	E-216	MW	08/13/2004	15.85	Product Not Found	0	2.83
South of Runway 18-36 Area	TFA	139	E-216	MW	08/17/2004	15.91	Product Not Found	0	2.77
South of Runway 18-36 Area	TFA	139	E-216	MW	08/20/2004	15.95			2.73
South of Runway 18-36 Area	TFA	139	E-216	MW	08/23/2004	15.89	Product Not Found	0	2.79
South of Runway 18-36 Area	TFA	139	E-216	MW	08/27/2004	16.09	Product Not Found	0	2.59
South of Runway 18-36 Area	TFA	139	E-216	MW	08/31/2004	15.97	Product Not Found	0	2.71
South of Runway 18-36 Area	TFA	139	E-216	MW	09/03/2004	16.58	Mixed Product	0.02	2.10
South of Runway 18-36 Area	TFA	139	E-216	MW	09/07/2004	16.64	Mixed Product	0.1	2.04
South of Runway 18-36 Area	TFA	139	E-216	MW	09/08/2004	17.10	Mixed Product	0.56	1.58
South of Runway 18-36 Area	TFA	139	E-216	MW	09/09/2004	16.71	Mixed Product	0.02	1.97
South of Runway 18-36 Area	TFA	139	E-216	MW	09/10/2004	16.29	Mixed Product	0.01	2.39
South of Runway 18-36 Area	TFA	139	E-216	MW	09/11/2004	16.18	Mix Sheen	0.01	2.50
South of Runway 18-36 Area	TFA	139	E-216	MW	09/12/2004	16.36	Mix Sheen	0.01	2.32
South of Runway 18-36 Area	TFA	139	E-216	MW	09/13/2004	16.49	Mix Sheen	0.01	2.19
South of Runway 18-36 Area	TFA	139	E-216	MW	09/14/2004	16.52	Mix Sheen	0.01	2.16
South of Runway 18-36 Area	TFA	139	E-216	MW	09/15/2004	16.58	Mix Sheen	0.01	2.10
South of Runway 18-36 Area	TFA	139	E-216	MW	09/16/2004	16.36	Mix Sheen	0.01	2.32
South of Runway 18-36 Area	TFA	139	E-216	MW	09/17/2004	16.31	Product Not Found	0	2.37
South of Runway 18-36 Area	TFA	139	E-216	MW	09/18/2004	16.32	Mix Sheen	0.01	2.36
South of Runway 18-36 Area	TFA	139	E-216	MW	09/19/2004	16.46	Mix Sheen	0.01	2.22

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	TFA	139	E-216	MW	09/20/2004	16.61	Mix Sheen	0.01	2.07
South of Runway 18-36 Area	TFA	139	E-216	MW	09/21/2004	16.07	Mixed Product	0.04	2.61
South of Runway 18-36 Area	TFA	139	E-216	MW	09/22/2004	16.40	Mix Sheen	0.01	2.28
South of Runway 18-36 Area	TFA	139	E-216	MW	09/23/2004	16.83	Mixed Product	0.32	1.85
South of Runway 18-36 Area	TFA	139	E-216	MW	09/24/2004	16.34	Mix Sheen	0.01	2.34
South of Runway 18-36 Area	TFA	139	E-216	MW	09/25/2004	16.17	Mix Sheen	0.01	2.51
South of Runway 18-36 Area	TFA	139	E-216	MW	09/26/2004	16.52	Mix Sheen	0.01	2.16
South of Runway 18-36 Area	TFA	139	E-216	MW	09/27/2004	16.59	Mixed Product	0.02	2.09
South of Runway 18-36 Area	TFA	139	E-216	MW	09/28/2004	16.08	Mixed Product	0.06	2.60
South of Runway 18-36 Area	TFA	139	E-216	MW	09/29/2004	16.09	Mix Sheen	0.01	2.59
South of Runway 18-36 Area	TFA	139	E-216	MW	10/23/2004	15.85	Mixed Product	0.05	2.83
South of Runway 18-36 Area	TFA	139	E-216	MW	10/26/2004	15.60	Mixed Product	0.05	3.08
South of Runway 18-36 Area	TFA	139	E-216	MW	10/27/2004	15.62	Mixed Product	0.12	3.06
South of Runway 18-36 Area	TFA	139	E-216	MW	11/03/2004	15.83	Mixed Product	0.03	2.85
South of Runway 18-36 Area	TFA	139	E-216	MW	12/02/2004	15.38	Mix Sheen	0.01	3.30
South of Runway 18-36 Area	TFA	139	E-216	MW	9/15/2005	15.82		0	2.86
South of Runway 18-36 Area	TFA	139	E-216	MW	9/20/2005	16.31		0	2.37
South of Runway 18-36 Area	TFA	139	E-216	MW	9/14/2006	16.28		0.17	2.40
South of Runway 18-36 Area	TFA	139	E-216	MW	9/29/2007	16.06	DRO	0.05	2.62
South of Runway 18-36 Area	TFA	139	E-216	MW	9/10/2008	16.30	DRO	0.04	2.38
South of Runway 18-36 Area	TFA	139	E-216	MW	9/12/2009	16.00	DRO	0.16	2.68
South of Runway 18-36 Area	TFA	139	E-216	MW	9/10/2010	16.46	DRO	0.35	2.22
South of Runway 18-36 Area	TFA	139	E-216	MW	8/31/2011	16.45	DRO	0.01	2.23
South of Runway 18-36 Area	TFA	139	E-216	MW	8/27/2012	16.52	DRO	0.43	2.16
South of Runway 18-36 Area	TFA	139	E-216	MW	8/30/2013	16.01	DRO	0.14	2.39
South of Runway 18-36 Area		140	E-217 (AMW-217)	MW	9/14/2006	15.65	Product Not Found	0	2.47
South of Runway 18-36 Area		140	E-217 (AMW-217)	MW	9/29/2007	15.33	DRO	0.15	2.79
South of Runway 18-36 Area		140	E-217 (AMW-217)	MW	9/10/2008	15.57	DRO	0.15	2.55
South of Runway 18-36 Area		140	E-217 (AMW-217)	MW	9/12/2009	15.54	Product Not Found	0	2.58
South of Runway 18-36 Area		140	E-217 (AMW-217)	MW	9/10/2010	15.89	Product Not Found	0	2.23
South of Runway 18-36 Area		140	E-217 (AMW-217)	MW	8/31/2011	15.74	Product Not Found	0	2.38
South of Runway 18-36 Area		140	E-217 (AMW-217)	MW	8/27/2012	15.62	Product Not Found	0	2.50
South of Runway 18-36 Area		140	E-217 (AMW-217)	MW	8/30/2013	15.60	DRO	0.04	2.52
South of Runway 18-36 Area	TFA	183	E-218	MW	04/01/2002	14.18	Product Not Found	0	1.85
South of Runway 18-36 Area	TFA	183	E-218	MW	10/09/2002	13.42	Product Not Found	0	2.61
South of Runway 18-36 Area	TFA	183	E-218	MW	10/14/2003	13.45	Product Not Found	0	2.58
South of Runway 18-36 Area	TFA	183	E-218	MW	08/03/2004	14.02	Product Not Found	0	2.01
South of Runway 18-36 Area	TFA	183	E-218	MW	08/08/2004	14.33	Product Not Found	0	1.70
South of Runway 18-36 Area	TFA	183	E-218	MW	08/13/2004	13.94	Product Not Found	0	2.09
South of Runway 18-36 Area	TFA	183	E-218	MW	08/17/2004	13.81	Product Not Found	0	2.22
South of Runway 18-36 Area	TFA	183	E-218	MW	08/20/2004	15.03			1.00
South of Runway 18-36 Area	TFA	183	E-218	MW	08/23/2004	13.76	Product Not Found	0	2.27
South of Runway 18-36 Area	TFA	183	E-218	MW	08/27/2004	13.96	Product Not Found	0	2.07
South of Runway 18-36 Area	TFA	183	E-218	MW	08/31/2004	13.98	Product Not Found	0	2.05
South of Runway 18-36 Area	TFA	183	E-218	MW	09/03/2004	14.12	Product Not Found	0	1.91
South of Runway 18-36 Area	TFA	183	E-218	MW	09/07/2004	14.17	Product Not Found	0	1.86
South of Runway 18-36 Area	TFA	183	E-218	MW	09/10/2004	13.80	Product Not Found	0	2.23
South of Runway 18-36 Area	TFA	183	E-218	MW	09/14/2004	14.31	Product Not Found	0	1.72
South of Runway 18-36 Area	TFA	183	E-218	MW	09/16/2004	14.39	Unknown Sheen	0	1.64
South of Runway 18-36 Area	TFA	183	E-218	MW	09/21/2004	14.22	Product Not Found	0	1.81

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area	TFA	183	E-218	MW	09/27/2004	14.17	Product Not Found	0	1.86
South of Runway 18-36 Area	TFA	183	E-218	MW	10/23/2004	13.55	Product Not Found	0	2.48
South of Runway 18-36 Area	TFA	183	E-218	MW	11/03/2004	13.55	Product Not Found	0	2.48
South of Runway 18-36 Area	TFA	183	E-218	MW	12/02/2004	13.14	Product Not Found	0	2.89
South of Runway 18-36 Area	TFA	183	E-218	MW	9/13/2005	14.19		0	1.84
South of Runway 18-36 Area	TFA	183	E-218	MW	9/19/2006	14.25		0	1.78
South of Runway 18-36 Area	TFA	183	E-218	MW	9/8/2007	13.26	Product Not Found	0	2.77
South of Runway 18-36 Area	TFA	183	E-218	MW	9/10/2008	14.14	Product Not Found	0	1.89
South of Runway 18-36 Area	TFA	183	E-218	MW	9/12/2009	14.06	Product Not Found	0	1.97
South of Runway 18-36 Area	TFA	183	E-218	MW	9/10/2010	14.41	Product Not Found	0	1.62
South of Runway 18-36 Area	TFA	183	E-218	MW	8/31/2011	14.30	Product Not Found	0	1.73
South of Runway 18-36 Area		61	LC6A (OLD 1)	MW	9/15/2006	12.70	Product Not Found	0	2.35
South of Runway 18-36 Area		61	LC6A (OLD 1)	MW	9/29/2007	12.55	Product Not Found	0	2.50
South of Runway 18-36 Area		61	LC6A (OLD 1)	MW	9/10/2008	12.74	Product Not Found	0	2.31
South of Runway 18-36 Area		61	LC6A (OLD 1)	MW	9/12/2009	12.58	Product Not Found	0	2.47
South of Runway 18-36 Area		61	LC6A (OLD 1)	MW	9/10/2010	12.92	Product Not Found	0	2.13
South of Runway 18-36 Area		61	LC6A (OLD 1)	MW	8/31/2011	12.75	Product Not Found	0	2.30
South of Runway 18-36 Area	MDP	112	MRP-12	MW	04/01/2002	9.62	Product Not Found	0	2.07
South of Runway 18-36 Area	MDP	112	MRP-12	MW	10/10/2002	8.70	Product Not Found	0	2.99
South of Runway 18-36 Area	MDP	112	MRP-12	MW	10/14/2003	8.70	Product Not Found	0	2.99
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/03/2004	9.02	Product Not Found	0	2.67
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/03/2004	9.52	Product Not Found	0	2.17
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/04/2004	9.23	Product Not Found	0	2.46
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/04/2004	9.22	Product Not Found	0	2.47
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/08/2004	9.41	Product Not Found	0	2.28
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/13/2004	9.95	Product Not Found	0	1.74
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/17/2004	9.05	Product Not Found	0	2.64
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/20/2004	9.15			2.54
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/23/2004	9.00	Product Not Found	0	2.69
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/27/2004	9.22	Product Not Found	0	2.47
South of Runway 18-36 Area	MDP	112	MRP-12	MW	08/31/2004	9.09	Product Not Found	0	2.60
South of Runway 18-36 Area	MDP	112	MRP-12	MW	09/03/2004	9.55	Product Not Found	0	2.14
South of Runway 18-36 Area	MDP	112	MRP-12	MW	09/07/2004	9.55	Product Not Found	0	2.14
South of Runway 18-36 Area	MDP	112	MRP-12	MW	09/10/2004	9.32	Mix Sheen	0.01	2.37
South of Runway 18-36 Area	MDP	112	MRP-12	MW	09/14/2004	9.49	Product Not Found	0	2.20
South of Runway 18-36 Area	MDP	112	MRP-12	MW	09/16/2004	9.43	Product Not Found	0	2.26
South of Runway 18-36 Area	MDP	112	MRP-12	MW	09/21/2004	9.23	Product Not Found	0	2.46
South of Runway 18-36 Area	MDP	112	MRP-12	MW	09/27/2004	9.50	Product Not Found	0	2.19
South of Runway 18-36 Area	MDP	112	MRP-12	MW	10/23/2004	8.75	Mix Sheen	0.01	2.94
South of Runway 18-36 Area	MDP	112	MRP-12	MW	11/03/2004	8.75	Mix Sheen	0.01	2.94
South of Runway 18-36 Area	MDP	112	MRP-12	MW	12/02/2004	8.40	Product Not Found	0	3.29
South of Runway 18-36 Area	MDP	112	MRP-12	MW	9/15/2005	8.88		0	2.81
South of Runway 18-36 Area	MDP	112	MRP-12	MW	9/22/2005	8.85		0	2.84
South of Runway 18-36 Area	MDP	112	MRP-12	MW	9/20/2006	9.30	Product Not Found	0	2.39
South of Runway 18-36 Area	MDP	112	MRP-12	MW	9/10/2007	8.30	Product Not Found	0	3.39
South of Runway 18-36 Area	MDP	112	MRP-12	MW	9/10/2008	9.33	Product Not Found	0	2.36
South of Runway 18-36 Area	MDP	112	MRP-12	MW	9/12/2009	9.04	Product Not Found	0	2.65
South of Runway 18-36 Area	MDP	112	MRP-12	MW	9/10/2010	9.39	Product Not Found	0	2.30
South of Runway 18-36 Area	MDP	112	MRP-12	MW	8/31/2011	9.29	Product Not Found	0	2.40
South of Runway 18-36 Area		750	NW1	RW	9/14/2006	9.92		0.04	11.43

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area		751	NW2	RW	9/15/2006	3.97	Product Not Found	0	16.03
South of Runway 18-36 Area		752	NW3	RW	9/21/2006	13.51	Product Not Found	0	12.54
South of Runway 18-36 Area		753	NW4	RW	9/14/2006	13.92	Product Not Found	0	13.28
South of Runway 18-36 Area		754	NW5	RW	9/15/2006	9.21	Product Not Found	0	12.04
South of Runway 18-36 Area		755	NW6	RW	9/14/2006	1.74	Product Not Found	0	21.76
South of Runway 18-36 Area		756	NW7	RW	9/15/2006	5.07	Product Not Found	0	14.03
South of Runway 18-36 Area			RW-18/36-01	RW	9/29/2007	9.55	Product Not Found	0	2.73
South of Runway 18-36 Area			RW-18/36-01	RW	9/10/2008	10.03	DRO	0.1	2.25
South of Runway 18-36 Area			RW-18/36-01	RW	9/12/2009	9.70	Product Not Found	0	2.58
South of Runway 18-36 Area			RW-18/36-01	RW	9/10/2010	10.05	Product Not Found	0	2.23
South of Runway 18-36 Area			RW-18/36-01	RW	8/31/2011	9.93	Product Not Found	0	2.35
South of Runway 18-36 Area			RW-18/36-02	RW	9/29/2007	3.55	Product Not Found	0	2.27
South of Runway 18-36 Area			RW-18/36-02	RW	9/10/2008	2.95	Product Not Found	0	2.87
South of Runway 18-36 Area			RW-18/36-02	RW	9/12/2009	3.99	Product Not Found	0	1.83
South of Runway 18-36 Area			RW-18/36-02	RW	9/10/2010	4.14	Product Not Found	0	1.68
South of Runway 18-36 Area			RW-18/36-02	RW	8/31/2011	4.05	Product Not Found	0	1.77
South of Runway 18-36 Area			RW-18/36-02	RW	8/27/2012	4.21	Product Not Found	0	1.61
South of Runway 18-36 Area			RW-18/36-03	RW	9/29/2007	12.81	Product Not Found	0	2.89
South of Runway 18-36 Area			RW-18/36-03	RW	9/10/2008	13.53	Product Not Found	0	2.17
South of Runway 18-36 Area			RW-18/36-03	RW	9/12/2009	13.06	Product Not Found	0	2.64
South of Runway 18-36 Area			RW-18/36-03	RW	9/10/2010	13.77	Product Not Found	0	1.93
South of Runway 18-36 Area			RW-18/36-03	RW	8/31/2011	13.77	Product Not Found	0	1.93
South of Runway 18-36 Area			RW-18/36-03	RW	8/30/2013	13.59	Product Not Found	0	NA
South of Runway 18-36 Area			RW-18/36-04	RW	9/29/2007	13.60	Product Not Found	0	2.69
South of Runway 18-36 Area			RW-18/36-04	RW	9/10/2008	14.07	DRO	0.02	2.22
South of Runway 18-36 Area			RW-18/36-04	RW	9/12/2009	13.98	Product Not Found	0	2.31
South of Runway 18-36 Area			RW-18/36-04	RW	9/10/2010	14.32	DRO	0.22	1.97
South of Runway 18-36 Area			RW-18/36-04	RW	8/31/2011	14.32	Product Not Found	0	2.06
South of Runway 18-36 Area			RW-18/36-04	RW	8/27/2012	13.78	DRO	0.06	2.51
South of Runway 18-36 Area			RW-18/36-04	RW	8/30/2013	13.48	DRO	0.14	2.81
South of Runway 18-36 Area			RW-18/36-05	RW	9/29/2007	8.78	Product Not Found	0	2.61
South of Runway 18-36 Area			RW-18/36-05	RW	9/10/2008	9.21	Product Not Found	0	2.18
South of Runway 18-36 Area			RW-18/36-05	RW	9/12/2009	9.04	Product Not Found	0	2.35
South of Runway 18-36 Area			RW-18/36-05	RW	9/10/2010	9.40	Product Not Found	0	1.99
South of Runway 18-36 Area			RW-18/36-05	RW	8/31/2011	9.23	Product Not Found	0	2.16
South of Runway 18-36 Area			RW-18/36-05	RW	8/27/2012	9.36	Product Not Found	0	2.03
South of Runway 18-36 Area			RW-18/36-05	RW	8/30/2013	8.93	Product Not Found	0	2.46
South of Runway 18-36 Area			RW-18/36-06	RW	9/29/2007	13.43	Product Not Found	0	2.69
South of Runway 18-36 Area			RW-18/36-06	RW	9/10/2008	13.81	Product Not Found	0	2.31
South of Runway 18-36 Area			RW-18/36-06	RW	9/12/2009	13.62	Product Not Found	0	2.50
South of Runway 18-36 Area			RW-18/36-06	RW	9/10/2010	13.96	Product Not Found	0	2.16
South of Runway 18-36 Area			RW-18/36-06	RW	8/31/2011	13.81	Product Not Found	0	2.31
South of Runway 18-36 Area			RW-18/36-07	RW	9/29/2007	4.67	Product Not Found	0	2.09
South of Runway 18-36 Area			RW-18/36-07	RW	9/10/2008	5.00	Product Not Found	0	1.76
South of Runway 18-36 Area			RW-18/36-07	RW	9/14/2009	4.97	Product Not Found	0	1.79
South of Runway 18-36 Area			RW-18/36-07	RW	9/10/2010	5.20	Product Not Found	0	1.56
South of Runway 18-36 Area			RW-18/36-07	RW	8/31/2011	5.11	Product Not Found	0	1.65
South of Runway 18-36 Area		501	Z 2-4	P	9/15/2006	9.18	Product Not Found	0	Unknown
South of Runway 18-36 Area		501	Z 2-4	P	9/29/2007	4.42	Product Not Found	0	Unknown
South of Runway 18-36 Area		501	Z 2-4	P	9/10/2008	9.15	Product Not Found	0	Unknown

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
South of Runway 18-36 Area		501	Z 2-4	P	9/12/2009	9.05	Product Not Found	0	Unknown
South of Runway 18-36 Area		501	Z 2-4	P	9/10/2010	9.36	Product Not Found	0	Unknown
South of Runway 18-36 Area		501	Z 2-4	P	8/31/2011	9.22	Product Not Found	0	Unknown
South of Runway 18-36 Area		503	Z 3-2	P	9/15/2006	10.11	Product Not Found	0	Unknown
South of Runway 18-36 Area		503	Z 3-2	P	9/29/2007	7.05	Product Not Found	0	Unknown
South of Runway 18-36 Area		503	Z 3-2	P	9/10/2008	10.24	Product Not Found	0	Unknown
South of Runway 18-36 Area		503	Z 3-2	P	9/12/2009	9.94	DRO	0.17	Unknown
South of Runway 18-36 Area		503	Z 3-2	P	9/10/2010	10.40	DRO	0.15	Unknown
South of Runway 18-36 Area		503	Z 3-2	P	8/31/2011	10.11	Product Not Found	0	Unknown
South of Runway 18-36 Area		503	Z 3-2	P	8/27/2012	10.29	Product Not Found	0	Unknown
South of Runway 18-36 Area		504	Z 3-6	P	9/15/2006	NM	Product Not Found	0	Unknown
South of Runway 18-36 Area		504	Z 3-6	P	9/10/2008	7.44	Product Not Found	0	Unknown
South of Runway 18-36 Area		504	Z 3-6	P	9/12/2009	7.35	Product Not Found	0	Unknown
South of Runway 18-36 Area		504	Z 3-6	P	9/10/2010	Dry	Product Not Found	0	Unknown
South of Runway 18-36 Area		504	Z 3-6	P	8/31/2011	7.51	Product Not Found	0	Unknown
South of Runway 18-36 Area		504	Z 3-6	P	8/27/2012	7.68	Product Not Found	0	Unknown
South of Runway 18-36 Area		504	Z 3-6	P	8/30/2013	7.25	Product Not Found	0	Unknown
South of Runway 18-36 Area		505	Z 4-2	P	9/15/2006	12.37	Product Not Found	0	Unknown
South of Runway 18-36 Area		505	Z 4-2	P	9/29/2007	12.10	Product Not Found	0	Unknown
South of Runway 18-36 Area		505	Z 4-2	P	9/10/2008	12.49	Product Not Found	0	Unknown
South of Runway 18-36 Area		505	Z 4-2	P	9/12/2009	12.25	Product Not Found	0	Unknown
South of Runway 18-36 Area		505	Z 4-2	P	9/10/2010	12.62	Product Not Found	0	Unknown
South of Runway 18-36 Area		505	Z 4-2	P	8/31/2011	12.47	Product Not Found	0	Unknown
South of Runway 18-36 Area		505	Z 4-2	P	8/27/2012	12.62	Product Not Found	0	Unknown
South of Runway 18-36 Area		505	Z 4-2	P	8/30/2013	12.17	Product Not Found	0	Unknown
SWMU 14 - OLD PESTICIDE DISPOSAL AREA AND GAS STATION	14	423	MW14-423	MW	10/07/2001	15.92	Product Not Found	0	4.97
SWMU 14 - OLD PESTICIDE DISPOSAL AREA AND GAS STATION			MW14-424	MW	9/16/2008	18.40	Product Not Found	0	5.10
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	06/04/2003	17.81	Product Not Found	0	6.48
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	10/03/2003	18.76	Product Not Found	0	5.53
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	11/10/2003	18.82	Product Not Found	0	5.47
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	09/17/2004	18.69	Product Not Found	0	5.60
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	09/28/2004	18.66	Unknown Odor	0	5.63
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	9/16/2005	18.45		0	5.84
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	9/16/2006	19.08	Product Not Found	0	5.21
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	9/22/2007	18.26	GRO	0.03	6.03
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	9/16/2008	18.69	Product Not Found	0	5.60
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	9/3/2009	18.17	Product Not Found	0	6.12
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	9/6/2010	18.59	Product Not Found	0	5.70
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	8/30/2012	18.46	Product Not Found	0	5.83
SWMU 14, Old Pesticide Storage and Disposal Area	14	153	01-153	MW	9/10/2013	18.54	Product Not Found	0	5.75
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	10/09/2001	15.60	Product Not Found	0	6.34
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	10/12/2002	15.58	Product Not Found	0	6.36
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	05/07/2003	14.62	Product Not Found	0	7.32
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	10/03/2003	16.33	Product Not Found	0	5.61
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	11/10/2003	16.33	Product Not Found	0	5.61
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	09/17/2004	16.15	Unknown Odor	0	5.79
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	09/28/2004	16.13	Product Not Found	0	5.81
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	9/16/2005	15.88		0	6.06
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	9/15/2006	16.63	Product Not Found	0	5.31
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	9/22/2007	15.86	Product Not Found	0	6.08

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	9/16/2008	16.14	Product Not Found	0	5.80
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	9/3/2009	15.54	Product Not Found	0	6.40
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	9/6/2010	16.05	Product Not Found	0	5.89
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	9/3/2011	15.53	Product Not Found	0	6.41
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	8/30/2012	15.87	Product Not Found	0	6.07
SWMU 14, Old Pesticide Storage and Disposal Area	14	201	MW-14-5	MW	9/10/2013	16.02	Product Not Found	0	5.92
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	689	MW-1 (15-1)	MW	10/25/2002	16.80	Product Not Found	0	6.91
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	424	MW15-424	MW	10/07/2001	18.10	Product Not Found	0	3.84
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	424	MW15-424	MW	10/14/2002	17.90	Product Not Found	0	4.04
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	424	MW15-424	MW	05/07/2003	17.85	Product Not Found	0	4.09
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	424	MW15-424	MW	10/03/2003	17.99	Product Not Found	0	3.95
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	424	MW15-424	MW	11/10/2003	18.20	Product Not Found	0	3.74
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	424	MW15-424	MW	9/3/2009	18.25	Product Not Found	0	3.69
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	424	MW15-424	MW	9/3/2010	18.37	Product Not Found	0	3.57
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	424	MW15-424	MW	9/3/2011	18.21	Product Not Found	0	3.73
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	424	MW15-424	MW	8/27/2012	18.40	Product Not Found	0	3.54
SWMU 15 - FUTURE JOBS/DRMO (OLD HAZ WASTE STORAGE)	15	424	MW15-424	MW	9/10/2013	18.19	Product Not Found	0	3.75
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	10/06/2001	13.67	Product Not Found	0	5.23
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	10/14/2002	13.70	Product Not Found	0	5.20
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	05/07/2003	13.52	Product Not Found	0	5.38
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	10/03/2003	14.02	Product Not Found	0	4.88
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	11/10/2003	14.18	Product Not Found	0	4.72
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	09/28/2004	14.16	Product Not Found	0	4.74
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	9/20/2005	13.75		0	5.15
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	9/12/2006	13.92	Product Not Found	0	4.98
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	9/22/2007	13.43	Product Not Found	0	5.47
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	9/16/2008	13.81	Product Not Found	0	5.09
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	8/31/2009	13.43	Product Not Found	0	5.47
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	9/3/2010	13.65	Product Not Found	0	5.25
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	9/3/2011	13.37	Product Not Found	0	5.53
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	8/30/2012	13.81	Product Not Found	0	5.09
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	15	8	MW15-3	MW	9/10/2013	13.54	Product Not Found	0	5.36
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	353	LT-MW3	RW	04/01/2002	3.09	Product Not Found	0	8.71
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	50	MW-17-7 (MW-50)	MW	04/01/2002	7.25	Product Not Found	0	14.67
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	364	MW-4	AW	06/26/2001	9.96	Product Not Found	0	12.06
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	364	MW-4	AW	11/02/2001	6.97	Product Not Found	0	15.05
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	364	MW-4	AW	04/01/2002	7.62	Product Not Found	0	14.40
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	367	MW-7	AW	06/25/2001	3.32	Product Not Found	0	8.38
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	367	MW-7	AW	11/02/2001	2.64	Product Not Found	0	9.06
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	1237	PP01	MW	04/01/2002	3.67	Product Not Found	0	36.63
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	1200	PP-02	MW	04/01/2002	5.38	Product Not Found	0	8.71
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	1201	PP-03	MW	04/01/2002	7.16	Product Not Found	0	11.10
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	1202	PP-04	MW	04/01/2002	4.84	Product Not Found	0	9.12
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	1203	PP-05	MW	04/01/2002	12.33	Product Not Found	0	26.14
SWMU 17 - POWER PLANT 3 AREA (AND SWMU 36-40 AND 63)	17	1204	PP-06	MW	04/01/2002	5.37	Product Not Found	0	15.85
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	10/14/2001	4.50	Product Not Found	0	8.50
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	10/03/2002	5.24	Product Not Found	0	7.76
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	10/09/2003	5.94	Product Not Found	0	7.06
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	09/13/2004	5.30	Unknown Odor	0	7.70
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	9/18/2005	5.27		0	7.73

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	9/16/2006	5.99	Product Not Found	0	7.01
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	9/21/2007	4.12	Product Not Found	0	8.88
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	9/19/2008	7.01	Product Not Found	0	5.99
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	9/8/2009	5.57	Product Not Found	0	7.43
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	9/9/2010	5.60	DRO	0.01	7.40
SWMU 17, Power Plant 3 Area	W-RWAY	375	05-375	MW	9/5/2012	4.33	Product Not Found	0	8.67
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	10/14/2001	16.29	Product Not Found	0	2.71
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	10/03/2002	16.13	Product Not Found	0	2.87
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	10/09/2003	17.17	Product Not Found	0	1.83
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	09/15/2004	17.70	Unknown Odor	0	1.30
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	9/19/2005	17.04		0	1.96
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	9/16/2006	16.67	Product Not Found	0	2.33
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	9/21/2007	15.61	Product Not Found	0	3.39
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	9/19/2008	16.85	Product Not Found	0	2.15
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	9/8/2009	16.39	Product Not Found	0	2.61
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	9/9/2010	16.54	Product Not Found	0	2.46
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	9/3/2011	16.72	Product Not Found	0	2.28
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	9/4/2012	15.98	Product Not Found	0	3.02
SWMU 17, Power Plant 3 Area	W-RWAY	735	05-735	MW	9/6/2013	15.84	Product Not Found	0	3.16
SWMU 17, Power Plant 3 Area	W-RWAY	810	05-810	MW	10/07/2001	9.30	Product Not Found	0	1.17
SWMU 17, Power Plant 3 Area	W-RWAY	810	05-810	MW	10/03/2002	8.12	Product Not Found	0	2.35
SWMU 17, Power Plant 3 Area	W-RWAY	810	05-810	MW	10/09/2003	8.38	Product Not Found	0	2.09
SWMU 17, Power Plant 3 Area	W-RWAY	810	05-810	MW	09/13/2004	9.51	Unknown Odor	0	0.96
SWMU 17, Power Plant 3 Area	W-RWAY	810	05-810	MW	9/18/2005	9.22		0	1.25
SWMU 17, Power Plant 3 Area	W-RWAY	810	05-810	MW	9/18/2006	9.47	Product Not Found	0	1.00
SWMU 17, Power Plant 3 Area	W-RWAY	811	05-811	MW	10/07/2001	7.05	Product Not Found	0	3.22
SWMU 17, Power Plant 3 Area	W-RWAY	811	05-811	MW	10/03/2002	6.91	Product Not Found	0	3.36
SWMU 17, Power Plant 3 Area	W-RWAY	811	05-811	MW	10/09/2003	7.22	Product Not Found	0	3.05
SWMU 17, Power Plant 3 Area	W-RWAY	811	05-811	MW	09/13/2004	7.35	Product Not Found	0	2.92
SWMU 17, Power Plant 3 Area	W-RWAY	811	05-811	MW	9/18/2005	6.97		0	3.30
SWMU 17, Power Plant 3 Area	W-RWAY	811	05-811	MW	9/18/2006	7.42	Product Not Found	0	2.85
SWMU 17, Power Plant 3 Area	W-RWAY	815	05-815	MW	10/07/2001	5.35	Product Not Found	0	6.46
SWMU 17, Power Plant 3 Area	W-RWAY	815	05-815	MW	10/03/2002	5.47	Product Not Found	0	6.34
SWMU 17, Power Plant 3 Area	W-RWAY	815	05-815	MW	10/09/2003	6.31	Product Not Found	0	5.50
SWMU 17, Power Plant 3 Area	W-RWAY	815	05-815	MW	09/13/2004	5.73	Unknown Odor	0	6.08
SWMU 17, Power Plant 3 Area	W-RWAY	815	05-815	MW	9/18/2005	5.92		0	5.89
SWMU 17, Power Plant 3 Area	W-RWAY	815	05-815	MW	9/18/2006	6.46	Product Not Found	0	5.35
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-1		9/22/2007	3.15	Product Not Found	0	
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-1		9/19/2008	6.62	Product Not Found	0	Unknown
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-1		9/9/2009	5.04	Product Not Found	0	Unknown
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-1		9/9/2010	5.46	Product Not Found	0	Unknown
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-2		9/22/2007	7.28	DRO	0.03	
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-2		9/19/2008	7.23	Product Not Found	0	Unknown
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-2		9/9/2009	5.66	Product Not Found	0	Unknown
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-2		9/9/2010	6.14	Product Not Found	0	Unknown
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-3		9/22/2007	6.72	Product Not Found	0	
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-3		9/19/2008	9.49	Product Not Found	0	Unknown
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-3		9/9/2009	8.09	Product Not Found	0	Unknown
SWMU 17, Power Plant 3 Area	W-RWAY	HC	HC-3		9/9/2010	8.51	Product Not Found	0	Unknown
SWMU 17, Power Plant 3 Area	W-RWAY	PP	PP-05		9/21/2007	11.28	DRO	0.17	27.22

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	PP	PP-05		9/19/2008	12.69	DRO	0.03	25.78
SWMU 17, Power Plant 3 Area	W-RWAY	PP	PP-05		9/9/2009	12.13	Product Not Found	0	26.34
SWMU 17, Power Plant 3 Area	W-RWAY	PP	PP-05		9/9/2010	12.50	Product Not Found	0	25.97
SWMU 17, Power Plant 3 Area	W-RWAY	PP	PP-05		9/5/2012	10.91	Product Not Found	0	27.56
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1	MW	9/21/2007	2.77	Product Not Found	0	10.66
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1	MW	9/19/2008	5.11	Product Not Found	0	8.32
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1	MW	9/8/2009	4.87	Product Not Found	0	8.56
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1	MW	9/9/2010	4.17	DRO	0.01	9.26
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1	MW	9/4/2012	2.24	Product Not Found	0	11.19
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/11/2001	4.46			8.97
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/12/2001	4.49			8.94
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/14/2001	4.12			9.31
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/18/2001	4.43			9.00
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/21/2001	4.72			8.71
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/22/2001	4.74			8.69
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/23/2001	4.79			8.64
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/24/2001	4.87			8.56
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/25/2001	4.88			8.55
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/26/2001	5.04			8.39
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/28/2001	5.00			8.43
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/29/2001	5.03			8.40
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/30/2001	5.06			8.37
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/31/2001	5.08			8.35
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/01/2001	5.09	Product Not Found	0	8.34
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/02/2001	5.13	Product Not Found	0	8.30
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/04/2001	5.19	Product Not Found	0	8.24
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/05/2001	5.24	Product Not Found	0	8.19
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/08/2001	5.28	Product Not Found	0	8.15
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/09/2001	5.31	Product Not Found	0	8.12
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/11/2001	5.35	Product Not Found	0	8.08
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/12/2001	5.36	Product Not Found	0	8.07
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/13/2001	5.41	Product Not Found	0	8.02
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/14/2001	5.42	Product Not Found	0	8.01
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/15/2001	5.44	Product Not Found	0	7.99
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/16/2001	5.45	Product Not Found	0	7.98
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/18/2001	4.47	Product Not Found	0	8.96
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/19/2001	4.84	Product Not Found	0	8.59
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/20/2001	4.96	Product Not Found	0	8.47
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/21/2001	3.68	Product Not Found	0	9.75
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/22/2001	4.01	Product Not Found	0	9.42
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/23/2001	4.32	Product Not Found	0	9.11
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/25/2001	4.74	Product Not Found	0	8.69
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/25/2001	4.73	Product Not Found	0	8.70
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/26/2001	4.58	Product Not Found	0	8.85
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/27/2001	4.23	Product Not Found	0	9.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/28/2001	4.46	Product Not Found	0	8.97
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/02/2001	4.85	Product Not Found	0	8.58
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/03/2001	4.28	Product Not Found	0	9.15
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/04/2001	4.50	Product Not Found	0	8.93
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/05/2001	4.67	Product Not Found	0	8.76

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/06/2001	4.61	Product Not Found	0	8.82
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/07/2001	4.62	Product Not Found	0	8.81
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/09/2001	4.76	Product Not Found	0	8.67
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/10/2001	4.74	Product Not Found	0	8.69
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/11/2001	4.74	Product Not Found	0	8.69
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/12/2001	4.43	Product Not Found	0	9.00
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/13/2001	16.21	Product Not Found	0	-2.78
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/14/2001	4.23	Product Not Found	0	9.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/16/2001	4.63	Product Not Found	0	8.80
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/17/2001	4.61	Product Not Found	0	8.82
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/18/2001	4.69	Product Not Found	0	8.74
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/19/2001	4.79	Product Not Found	0	8.64
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/20/2001	4.83	Product Not Found	0	8.60
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/21/2001	5.84	Product Not Found	0	7.59
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/23/2001	5.01	Product Not Found	0	8.42
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/24/2001	5.99	Product Not Found	0	7.44
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/25/2001	5.03	Product Not Found	0	8.40
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/26/2001	5.01	Product Not Found	0	8.42
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/27/2001	5.67	Product Not Found	0	7.76
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/28/2001	5.09	Product Not Found	0	8.34
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/30/2001	5.14	Product Not Found	0	8.29
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/31/2001	5.17	Product Not Found	0	8.26
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/01/2001	5.18	Product Not Found	0	8.25
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/02/2001	5.17	Product Not Found	0	8.26
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/03/2001	5.08	Product Not Found	0	8.35
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/04/2001	5.10	Product Not Found	0	8.33
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/06/2001	4.88	Product Not Found	0	8.55
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/07/2001	4.92	Product Not Found	0	8.51
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/08/2001	4.89	Product Not Found	0	8.54
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/09/2001	4.94	Product Not Found	0	8.49
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/10/2001	5.00	Product Not Found	0	8.43
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/11/2001	5.04	Product Not Found	0	8.39
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/13/2001	5.11	Product Not Found	0	8.32
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/14/2001	5.13	Product Not Found	0	8.30
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/15/2001	5.17	Product Not Found	0	8.26
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/16/2001	5.19	Product Not Found	0	8.24
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/17/2001	5.23	Product Not Found	0	8.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/18/2001	5.23	Product Not Found	0	8.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/20/2001	4.99	Product Not Found	0	8.44
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/21/2001	5.01	Product Not Found	0	8.42
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/22/2001	4.80	Product Not Found	0	8.63
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/23/2001	4.86	Product Not Found	0	8.57
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/24/2001	4.93	Product Not Found	0	8.50
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/25/2001	4.99	Diesel	0	8.44
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/27/2001	5.07	Product Not Found	0	8.36
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/28/2001	4.97	Product Not Found	0	8.46
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/29/2001	4.96	Product Not Found	0	8.47
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/30/2001	4.97	Product Not Found	0	8.46
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/31/2001	4.98	Product Not Found	0	8.45
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/01/2001	5.02	Product Not Found	0	8.41

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/03/2001	4.89	Product Not Found	0	8.54
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/04/2001	4.82	Product Not Found	0	8.61
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/05/2001	4.92	Product Not Found	0	8.51
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/06/2001	4.97	Product Not Found	0	8.46
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/07/2001	5.01	Product Not Found	0	8.42
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/08/2001	5.05	Product Not Found	0	8.38
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/10/2001	5.13	Product Not Found	0	8.30
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/11/2001	5.00	Product Not Found	0	8.43
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/12/2001	4.92	Product Not Found	0	8.51
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/13/2001	4.89	Product Not Found	0	8.54
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/14/2001	4.02	Product Not Found	0	9.41
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/15/2001	4.31	Product Not Found	0	9.12
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/17/2001	4.55	Product Not Found	0	8.88
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/18/2001	4.64	Product Not Found	0	8.79
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/19/2001	4.62	Product Not Found	0	8.81
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/20/2001	4.63	Product Not Found	0	8.80
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/21/2001	4.73	Product Not Found	0	8.70
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/22/2001	4.71	Product Not Found	0	8.72
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/24/2001	4.84	Product Not Found	0	8.59
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/25/2001	4.88	Product Not Found	0	8.55
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/26/2001	4.89	Product Not Found	0	8.54
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/27/2001	4.88	Product Not Found	0	8.55
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/28/2001	4.93	Product Not Found	0	8.50
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/29/2001	4.91	Product Not Found	0	8.52
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/01/2001	4.81	Product Not Found	0	8.62
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/02/2001	4.37	Product Not Found	0	9.06
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/03/2001	4.48	Product Not Found	0	8.95
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/04/2001	4.29	Product Not Found	0	9.14
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/05/2001	4.31	Product Not Found	0	9.12
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/06/2001	4.08	Product Not Found	0	9.35
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/07/2001	3.82	Diesel	0.01	9.61
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/08/2001	3.31	Product Not Found	0	10.12
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/09/2001	3.68	Product Not Found	0	9.75
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/10/2001	3.91	Product Not Found	0	9.52
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/11/2001	4.47	Product Not Found	0	8.96
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/12/2001	4.21	Product Not Found	0	9.22
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/13/2001	4.21	Product Not Found	0	9.22
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/15/2001	3.34	Product Not Found	0	10.09
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/16/2001	3.69	Product Not Found	0	9.74
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/17/2001	3.95	Product Not Found	0	9.48
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/18/2001	3.99	Product Not Found	0	9.44
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/19/2001	3.95	Product Not Found	0	9.48
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/20/2001	3.99	Product Not Found	0	9.44
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/22/2001	4.23	Product Not Found	0	9.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/23/2001	4.31	Product Not Found	0	9.12
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/24/2001	4.39	Product Not Found	0	9.04
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/25/2001	4.46	Product Not Found	0	8.97
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/26/2001	4.04	Product Not Found	0	9.39
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/27/2001	4.27	Product Not Found	0	9.16
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/29/2001	3.83	Product Not Found	0	9.60

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/30/2001	3.54	Product Not Found	0	9.89
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/31/2001	3.64	Product Not Found	0	9.79
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/01/2001	3.90	Product Not Found	0	9.53
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/02/2001	4.14	Product Not Found	0	9.29
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/02/2001	4.14	Product Not Found	0	9.29
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/03/2001	4.23	Product Not Found	0	9.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/05/2001	3.14	Product Not Found	0	10.29
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/06/2001	3.43	Product Not Found	0	10.00
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/07/2001	3.55	Product Not Found	0	9.88
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/08/2001	3.72	Product Not Found	0	9.71
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/09/2001	3.62	Product Not Found	0	9.81
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/10/2001	2.30	Product Not Found	0	11.13
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/12/2001	3.32	Product Not Found	0	10.11
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/13/2001	3.58	Product Not Found	0	9.85
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/14/2001	3.65	Product Not Found	0	9.78
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	04/01/2002	4.30	Product Not Found	0	9.13
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/11/2002	4.63	Product Not Found	0	8.80
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/12/2002	3.90	Product Not Found	0	9.53
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/13/2002	3.97	Product Not Found	0	9.46
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/14/2002	3.95	Product Not Found	0	9.48
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/15/2002	4.16	Product Not Found	0	9.27
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/16/2002	4.29	Product Not Found	0	9.14
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/17/2002	4.14	Product Not Found	0	9.29
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/18/2002	3.38	Product Not Found	0	10.05
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/20/2002	2.98	Product Not Found	0	10.45
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/21/2002	4.14	Product Not Found	0	9.29
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/22/2002	4.29	Product Not Found	0	9.14
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/23/2002	4.32	Product Not Found	0	9.11
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/24/2002	3.91	Product Not Found	0	9.52
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/25/2002	4.08	Product Not Found	0	9.35
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/27/2002	4.37	Product Not Found	0	9.06
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/28/2002	4.46	Product Not Found	0	8.97
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/29/2002	4.51	Product Not Found	0	8.92
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/30/2002	4.54	Product Not Found	0	8.89
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	05/31/2002	4.44	Product Not Found	0	8.99
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/01/2002	4.53	Product Not Found	0	8.90
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/03/2002	3.48	Product Not Found	0	9.95
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/04/2002	4.72	Product Not Found	0	8.71
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/05/2002	4.80	Product Not Found	0	8.63
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/06/2002	4.74	Product Not Found	0	8.69
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/07/2002	4.78	Product Not Found	0	8.65
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/08/2002	4.78	Product Not Found	0	8.65
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/10/2002	4.19	Product Not Found	0	9.24
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/11/2002	4.93	Product Not Found	0	8.50
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/12/2002	4.91	Product Not Found	0	8.52
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/13/2002	4.33	Product Not Found	0	9.10
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/14/2002	4.27	Product Not Found	0	9.16
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/15/2002	4.39	Product Not Found	0	9.04
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/17/2002	4.57	Product Not Found	0	8.86
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/18/2002	4.55	Product Not Found	0	8.88

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/19/2002	4.65	Product Not Found	0	8.78
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/20/2002	4.69	Product Not Found	0	8.74
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/21/2002	4.73	Product Not Found	0	8.70
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/22/2002	4.48	Product Not Found	0	8.95
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/24/2002	4.64	Product Not Found	0	8.79
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/25/2002	4.69	Product Not Found	0	8.74
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/26/2002	4.75	Product Not Found	0	8.68
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/27/2002	4.79	Product Not Found	0	8.64
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/28/2002	4.85	Product Not Found	0	8.58
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	06/29/2002	4.91	Product Not Found	0	8.52
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/01/2002	4.80	Product Not Found	0	8.63
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/02/2002	3.85	Product Not Found	0	9.58
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/03/2002	5.07	Product Not Found	0	8.36
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/04/2002	5.08	Product Not Found	0	8.35
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/05/2002	5.09	Product Not Found	0	8.34
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/06/2002	5.13	Product Not Found	0	8.30
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/08/2002	5.18	Product Not Found	0	8.25
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/09/2002	5.23	Product Not Found	0	8.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/10/2002	5.23	Product Not Found	0	8.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/11/2002	4.92	Product Not Found	0	8.51
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/12/2002	4.84	Product Not Found	0	8.59
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/13/2002	4.99	Product Not Found	0	8.44
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/15/2002	5.11	Product Not Found	0	8.32
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/16/2002	5.15	Product Not Found	0	8.28
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/17/2002	5.19	Product Not Found	0	8.24
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/18/2002	5.22	Product Not Found	0	8.21
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/19/2002	5.23	Product Not Found	0	8.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/20/2002	5.19	Product Not Found	0	8.24
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/22/2002	5.23	Product Not Found	0	8.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/23/2002	5.23	Product Not Found	0	8.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/24/2002	5.24	Product Not Found	0	8.19
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/25/2002	5.23	Product Not Found	0	8.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/26/2002	5.09	Product Not Found	0	8.34
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/27/2002	5.09	Product Not Found	0	8.34
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/29/2002	5.10	Product Not Found	0	8.33
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/30/2002	5.10	Product Not Found	0	8.33
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	07/31/2002	5.08	Product Not Found	0	8.35
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/01/2002	5.10	Product Not Found	0	8.33
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/02/2002	5.15	Product Not Found	0	8.28
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/03/2002	5.17	Product Not Found	0	8.26
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/05/2002	5.22	Product Not Found	0	8.21
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/06/2002	5.24	Product Not Found	0	8.19
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/07/2002	5.24	Product Not Found	0	8.19
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/08/2002	5.31	Product Not Found	0	8.12
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/09/2002	5.31	Product Not Found	0	8.12
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/10/2002	3.87	Product Not Found	0	9.56
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/12/2002	3.48	Product Not Found	0	9.95
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/13/2002	4.81	Product Not Found	0	8.62
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/14/2002	4.02	Product Not Found	0	9.41
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/15/2002	3.65	Product Not Found	0	9.78

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/16/2002	3.70	Product Not Found	0	9.73
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/17/2002	3.82	Product Not Found	0	9.61
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/19/2002	3.28	Product Not Found	0	10.15
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/20/2002	2.97	Product Not Found	0	10.46
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/21/2002	3.16	Product Not Found	0	10.27
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/22/2002	3.34	Product Not Found	0	10.09
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/23/2002	3.48	Product Not Found	0	9.95
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/24/2002	3.46	Product Not Found	0	9.97
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/26/2002	3.56	Product Not Found	0	9.87
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/27/2002	3.58	Product Not Found	0	9.85
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/28/2002	3.59	Product Not Found	0	9.84
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/29/2002	3.70	Product Not Found	0	9.73
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/30/2002	3.82	Product Not Found	0	9.61
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	08/31/2002	3.82	Product Not Found	0	9.61
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/02/2002	3.91	Product Not Found	0	9.52
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/03/2002	3.24	Product Not Found	0	10.19
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/11/2002	4.07	Product Not Found	0	9.36
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/12/2002	3.99	Product Not Found	0	9.44
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/13/2002	3.18	Product Not Found	0	10.25
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/14/2002	3.16	Product Not Found	0	10.27
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/16/2002	3.52	Diesel	0.01	9.91
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/17/2002	3.71	Diesel	0.01	9.72
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/18/2002	3.83	Product Not Found	0	9.60
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/19/2002	3.79	Product Not Found	0	9.64
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/20/2002	3.87	Product Not Found	0	9.56
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/21/2002	3.97	Product Not Found	0	9.46
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/23/2002	4.17	Product Not Found	0	9.26
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/24/2002	4.23	Product Not Found	0	9.20
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/25/2002	2.45	Product Not Found	0	10.98
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/26/2002	2.45	Product Not Found	0	10.98
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/27/2002	2.79	Product Not Found	0	10.64
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/28/2002	2.91	Product Not Found	0	10.52
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/30/2002	3.25	Product Not Found	0	10.18
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/01/2002	3.41	Product Not Found	0	10.02
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/02/2002	2.57	Product Not Found	0	10.86
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/03/2002	3.68	Product Not Found	0	9.75
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/04/2002	3.81	Product Not Found	0	9.62
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/05/2002	3.92	Product Not Found	0	9.51
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/07/2002	4.16	Product Not Found	0	9.27
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/08/2002	4.21	Product Not Found	0	9.22
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/09/2002	2.79	Product Not Found	0	10.64
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/10/2002	2.86	Product Not Found	0	10.57
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/11/2002	2.61	Product Not Found	0	10.82
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/12/2002	2.81	Product Not Found	0	10.62
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/14/2002	2.87	Product Not Found	0	10.56
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/15/2002	2.93	Product Not Found	0	10.50
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/16/2002	3.01	Product Not Found	0	10.42
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/17/2002	3.11	Product Not Found	0	10.32
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/18/2002	2.77	Product Not Found	0	10.66
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/19/2002	2.30	Product Not Found	0	11.13

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/21/2002	2.45	Product Not Found	0	10.98
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/22/2002	2.35	Product Not Found	0	11.08
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/23/2002	2.64	Product Not Found	0	10.79
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/24/2002	2.77	Product Not Found	0	10.66
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/25/2002	2.56	Product Not Found	0	10.87
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/26/2002	2.95	Product Not Found	0	10.48
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/28/2002	3.11	Product Not Found	0	10.32
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/29/2002	3.15	Product Not Found	0	10.28
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/30/2002	3.10	Product Not Found	0	10.33
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/31/2002	2.75	Product Not Found	0	10.68
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/01/2002	2.62	Product Not Found	0	10.81
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/02/2002	2.70	Product Not Found	0	10.73
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/04/2002	2.66	Product Not Found	0	10.77
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/05/2002	2.35	Product Not Found	0	11.08
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/06/2002	1.93	Product Not Found	0	11.50
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/07/2002	2.28	Product Not Found	0	11.15
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/08/2002	2.46	Product Not Found	0	10.97
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	11/09/2002	2.68	Product Not Found	0	10.75
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/09/2003	4.72	Product Not Found	0	8.71
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	10/14/2003	4.79	Product Not Found	0	8.64
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	09/15/2004	3.82	Unknown Sheen	0	9.61
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	9/19/2005	3.37		0	10.06
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	9/16/2006	4.03	Product Not Found	0	9.40
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-1 (03-004)	MW	9/16/2006	4.03	Product Not Found	0	9.40
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-2	MW	9/21/2007	6.05	Product Not Found	0	6.76
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-2	MW	9/19/2008	8.44	Product Not Found	0	4.37
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-2	MW	9/8/2009	7.08	NA	TRACE	5.73
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-2	MW	9/9/2010	7.31	Product Not Found	TRACE	5.50
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-3	MW	9/22/2007	19.83	Product Not Found	0	-0.60
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-3	MW	9/19/2008	7.31	Product Not Found	0	11.92
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-3	MW	9/9/2009	6.36	Product Not Found	0	12.87
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-3	MW	9/9/2010	6.70	Product Not Found	0	12.53
SWMU 17, Power Plant 3 Area	W-RWAY	4	R-4	MW	9/21/2007	2.73	Product Not Found	0	12.20
SWMU 17, Power Plant 3 Area	W-RWAY	5	R-5	MW	9/19/2008	4.89	Product Not Found	0	10.04
SWMU 17, Power Plant 3 Area	W-RWAY	5	R-5	MW	9/9/2009	3.63	Product Not Found	0	11.30
SWMU 17, Power Plant 3 Area	W-RWAY	5	R-5	MW	9/9/2010	3.67	Product Not Found	0	11.26
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/12/2001	11.47			8.68
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/14/2001	9.47	Diesel	0.11	10.68
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/18/2001	9.54	Diesel	0.13	10.61
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/19/2001	9.61			10.54
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/21/2001	9.67			10.48
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/22/2001	9.70			10.45
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/23/2001	9.75			10.40
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/24/2001	9.75			10.40
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/25/2001	9.12			11.03
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/26/2001	9.16			10.99
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/28/2001	9.18			10.97
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/30/2001	9.21			10.94
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/31/2001	9.17			10.98
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/01/2001	9.20	Diesel	0.01	10.95

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/02/2001	9.21	Diesel Sheen	0.01	10.94
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/04/2001	9.30	Diesel	0.05	10.85
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/05/2001	9.94	Product Not Found	0	10.21
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/08/2001	9.38	Product Not Found	0	10.77
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/09/2001	9.38	Product Not Found	0	10.77
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/11/2001	9.41	Diesel	0.01	10.74
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/12/2001	10.11	Product Not Found	0	10.04
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/13/2001	9.48	Product Not Found	0	10.67
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/14/2001	10.13	Product Not Found	0	10.02
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/15/2001	9.51	Product Not Found	0	10.64
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/16/2001	9.54	Product Not Found	0	10.61
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/18/2001	8.73	Product Not Found	0	11.42
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/19/2001	9.02	Product Not Found	0	11.13
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/20/2001	9.74	Product Not Found	0	10.41
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/21/2001	6.17	Diesel	0.02	13.98
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/22/2001	8.66	Diesel	0.01	11.49
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/23/2001	8.66	Diesel Sheen	0.01	11.49
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/25/2001	8.91	Product Not Found	0	11.24
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/26/2001	8.98	Diesel Sheen	0.01	11.17
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/27/2001	8.28	Diesel	0.01	11.87
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/28/2001	9.38	Product Not Found	0	10.77
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/02/2001	8.79	Product Not Found	0	11.36
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/03/2001	7.33	Product Not Found	0	12.82
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/04/2001	8.62	Product Not Found	0	11.53
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/05/2001	9.13	Product Not Found	0	11.02
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/06/2001	8.66	Product Not Found	0	11.49
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/07/2001	8.89	Product Not Found	0	11.26
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/09/2001	9.02	Product Not Found	0	11.13
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/10/2001	8.86	Product Not Found	0	11.29
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/11/2001	8.86	Product Not Found	0	11.29
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/12/2001	7.91	Product Not Found	0	12.24
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/13/2001	9.49	Product Not Found	0	10.66
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/14/2001	8.48	Product Not Found	0	11.67
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/16/2001	8.79	Product Not Found	0	11.36
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/17/2001	8.81	Product Not Found	0	11.34
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/18/2001	8.89	Product Not Found	0	11.26
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/19/2001	8.96	Product Not Found	0	11.19
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/20/2001	9.01	Product Not Found	0	11.14
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/21/2001	9.03	Product Not Found	0	11.12
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/23/2001	9.66	Product Not Found	0	10.49
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/24/2001	9.13	Diesel	0.02	11.02
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/25/2001	9.02	Diesel Sheen	0.01	11.13
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/26/2001	9.01	Diesel Sheen	0.01	11.14
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/27/2001	9.67	Diesel Sheen	0.01	10.48
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/28/2001	9.15	Diesel	0.01	11.00
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/30/2001	9.18	Diesel	0.01	10.97
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/31/2001	9.19	Product Not Found	0	10.96
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/01/2001	9.11	Product Not Found	0	11.04
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/02/2001	9.13	Product Not Found	0	11.02
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/03/2001	8.86	Product Not Found	0	11.29

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/04/2001	9.11	Product Not Found	0	11.04
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/06/2001	8.87	Product Not Found	0	11.28
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/07/2001	8.94	Product Not Found	0	11.21
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/08/2001	9.52	Product Not Found	0	10.63
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/09/2001	9.01	Product Not Found	0	11.14
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/10/2001	9.04	Product Not Found	0	11.11
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/11/2001	9.07	Product Not Found	0	11.08
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/13/2001	9.10	Diesel	0.03	11.05
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/14/2001	9.10	Product Not Found	0	11.05
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/15/2001	9.11	Product Not Found	0	11.04
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/16/2001	9.13	Product Not Found	0	11.02
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/17/2001	9.15	Product Not Found	0	11.00
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/18/2001	9.16	Product Not Found	0	10.99
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/20/2001	8.86	Diesel	0.01	11.29
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/21/2001	8.91	Product Not Found	0	11.24
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/22/2001	8.53	Product Not Found	0	11.62
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/23/2001	8.80	Product Not Found	0	11.35
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/24/2001	8.88	Product Not Found	0	11.27
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/25/2001	8.91	Product Not Found	0	11.24
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/27/2001	9.02	Diesel	0.02	11.13
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/28/2001	8.72	Diesel	0.04	11.43
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/29/2001	8.79	Product Not Found	0	11.36
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/30/2001	8.74	Product Not Found	0	11.41
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/31/2001	8.86	Diesel Sheen	0.01	11.29
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/01/2001	8.93	Product Not Found	0	11.22
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/03/2001	8.06	Product Not Found	0	12.09
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/04/2001	8.65	Diesel	0.01	11.50
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/06/2001	8.88	Product Not Found	0	11.27
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/07/2001	8.91	Product Not Found	0	11.24
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/08/2001	8.98	Product Not Found	0	11.17
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/10/2001	9.04	Product Not Found	0	11.11
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/11/2001	8.40	Product Not Found	0	11.75
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/12/2001	8.62	Product Not Found	0	11.53
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/13/2001	8.81	Product Not Found	0	11.34
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/14/2001	7.85	Diesel	0.01	12.30
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/15/2001	9.31	Diesel	0.01	10.84
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/17/2001	8.43	Diesel	0.01	11.72
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/18/2001	9.36	Product Not Found	0	10.79
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/19/2001	8.46	Product Not Found	0	11.69
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/20/2001	8.67	Product Not Found	0	11.48
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/21/2001	9.46	Product Not Found	0	10.69
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/22/2001	8.52	Product Not Found	0	11.63
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/24/2001	8.91	Product Not Found	0	11.24
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/25/2001	8.93	Product Not Found	0	11.22
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/26/2001	8.79	Product Not Found	0	11.36
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/27/2001	9.48	Product Not Found	0	10.67
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/28/2001	11.66	Product Not Found	0	8.49
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/29/2001	9.00	Product Not Found	0	11.15
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/01/2001	8.78	Product Not Found	0	11.37
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/02/2001	8.49	Product Not Found	0	11.66

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/03/2001	8.45	Product Not Found	0	11.70
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/04/2001	8.29	Diesel Sheen	0.01	11.86
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/05/2001	7.94	Product Not Found	0	12.21
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/06/2001	7.97	Diesel	0.02	12.18
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/08/2001	6.67	Diesel	0.03	13.48
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/09/2001	7.43	Diesel	0.03	12.72
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/10/2001	9.58	Diesel	0.04	10.57
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/11/2001	7.43	Product Not Found	0	12.72
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/12/2001	7.48	Product Not Found	0	12.67
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/13/2001	7.57	Product Not Found	0	12.58
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/15/2001	6.81	Diesel	0.02	13.34
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/16/2001	8.01	Diesel Sheen	0.01	12.14
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/17/2001	7.58	Product Not Found	0	12.57
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/18/2001	6.74	Product Not Found	0	13.41
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/19/2001	7.38	Product Not Found	0	12.77
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/20/2001	7.57	Product Not Found	0	12.58
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/22/2001	7.93	Product Not Found	0	12.22
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/23/2001	8.05	Product Not Found	0	12.10
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/24/2001	7.96	Product Not Found	0	12.19
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/25/2001	8.41	Product Not Found	0	11.74
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/26/2001	6.89	Product Not Found	0	13.26
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/27/2001	8.02	Product Not Found	0	12.13
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/29/2001	7.55	Product Not Found	0	12.60
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/30/2001	6.35	Product Not Found	0	13.80
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/31/2001	7.06	Product Not Found	0	13.09
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/01/2001	7.59	Product Not Found	0	12.56
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/02/2001	7.72	Product Not Found	0	12.43
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/03/2001	7.88	Product Not Found	0	12.27
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/05/2001	6.66	Product Not Found	0	13.49
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/06/2001	7.23	Product Not Found	0	12.92
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/07/2001	7.22	Product Not Found	0	12.93
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/08/2001	7.46	Product Not Found	0	12.69
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/09/2001	6.98	Product Not Found	0	13.17
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/10/2001	5.79	Product Not Found	0	14.36
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/12/2001	6.81	Product Not Found	0	13.34
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/13/2001	7.05	Product Not Found	0	13.10
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/14/2001	7.18	Product Not Found	0	12.97
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/11/2002	6.24	Product Not Found	0	13.91
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/12/2002	6.57	Product Not Found	0	13.58
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/13/2002	7.19	Product Not Found	0	12.96
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/14/2002	6.68	Product Not Found	0	13.47
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/15/2002	7.51	Product Not Found	0	12.64
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/16/2002	7.72	Product Not Found	0	12.43
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/17/2002	6.89	Product Not Found	0	13.26
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/18/2002	6.75	Product Not Found	0	13.40
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/20/2002	7.68	Product Not Found	0	12.47
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/21/2002	7.94	Product Not Found	0	12.21
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/22/2002	8.26	Product Not Found	0	11.89
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/23/2002	8.37	Product Not Found	0	11.78
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/24/2002	7.61	Product Not Found	0	12.54

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/25/2002	8.13	Product Not Found	0	12.02
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/27/2002	8.57	Product Not Found	0	11.58
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/28/2002	8.71	Product Not Found	0	11.44
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/29/2002	8.69	Product Not Found	0	11.46
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/30/2002	8.70	Product Not Found	0	11.45
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	05/31/2002	8.41	Product Not Found	0	11.74
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/01/2002	7.64	Product Not Found	0	12.51
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/03/2002	5.08	Product Not Found	0	15.07
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/04/2002	6.95	Product Not Found	0	13.20
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/05/2002	9.00	Product Not Found	0	11.15
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/06/2002	8.87	Product Not Found	0	11.28
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/07/2002	8.95	Product Not Found	0	11.20
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/08/2002	8.90	Diesel Sheen	0.01	11.25
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/10/2002	9.10	Product Not Found	0	11.05
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/11/2002	9.18	Product Not Found	0	10.97
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/12/2002	9.16	Product Not Found	0	10.99
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/13/2002	7.05	Diesel Sheen	0.01	13.10
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/14/2002	7.93	Diesel Sheen	0.01	12.22
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/15/2002	8.06	Product Not Found	0	12.09
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/17/2002	8.30	Diesel	0.02	11.85
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/18/2002	8.22	Diesel	0.02	11.93
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/19/2002	8.42	Diesel Sheen	0.01	11.73
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/20/2002	8.58	Diesel Sheen	0.01	11.57
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/21/2002	8.56	Diesel Sheen	0.01	11.59
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/22/2002	8.03	Product Not Found	0	12.12
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/24/2002	8.48	Product Not Found	0	11.67
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/25/2002	8.51	Product Not Found	0	11.64
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/26/2002	8.63	Product Not Found	0	11.52
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/27/2002	8.75	Product Not Found	0	11.40
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/28/2002	9.84	Product Not Found	0	10.31
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	06/29/2002	8.92	Product Not Found	0	11.23
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/01/2002	9.04	Product Not Found	0	11.11
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/02/2002	5.23	Product Not Found	0	14.92
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/03/2002	9.21	Diesel Sheen	0.01	10.94
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/04/2002	9.18	Product Not Found	0	10.97
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/05/2002	9.22	Diesel Sheen	0.01	10.93
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/06/2002	9.25	Product Not Found	0	10.90
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/08/2002	9.33	Product Not Found	0	10.82
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/09/2002	9.36	Diesel Sheen	0.01	10.79
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/10/2002	9.38	Product Not Found	0	10.77
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/11/2002	7.42	Product Not Found	0	12.73
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/12/2002	8.71	Diesel Sheen	0.01	11.44
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/13/2002	9.13	Diesel Sheen	0.01	11.02
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/15/2002	9.34	Diesel Sheen	0.01	10.81
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/16/2002	9.39	Diesel Sheen	0.01	10.76
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/17/2002	9.42	Diesel Sheen	0.01	10.73
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/18/2002	9.45	Diesel Sheen	0.01	10.70
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/19/2002	9.47	Diesel Sheen	0.01	10.68
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/20/2002	9.40	Diesel Sheen	0.01	10.75
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/22/2002	9.44	Diesel Sheen	0.01	10.71

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/23/2002	9.49	Diesel	0.03	10.66
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/24/2002	9.41	Diesel	0.01	10.74
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/25/2002	9.14	Diesel Sheen	0.01	11.01
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/26/2002	8.98	Diesel Sheen	0.01	11.17
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/27/2002	8.92	Diesel Sheen	0.01	11.23
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/29/2002	8.89	Product Not Found	0	11.26
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/30/2002	8.87	Product Not Found	0	11.28
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	07/31/2002	8.89	Product Not Found	0	11.26
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/01/2002	8.90	Product Not Found	0	11.25
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/02/2002	9.01	Product Not Found	0	11.14
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/03/2002	9.01	Product Not Found	0	11.14
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/05/2002	9.04	Diesel Sheen	0.01	11.11
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/06/2002	9.05	Diesel Sheen	0.01	11.10
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/07/2002	9.08	Diesel Sheen	0.01	11.07
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/08/2002	9.11	Diesel Sheen	0.01	11.04
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/09/2002	9.13	Diesel Sheen	0.01	11.02
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/10/2002	5.66	Product Not Found	0	14.49
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/12/2002	6.25	Diesel Sheen	0.01	13.90
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/13/2002	6.54	Diesel Sheen	0.01	13.61
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/14/2002	6.82	Diesel Sheen	0.01	13.33
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/15/2002	6.06	Product Not Found	0	14.09
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/16/2002	6.77	Diesel Sheen	0.01	13.38
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/17/2002	6.76	Product Not Found	0	13.39
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/19/2002	5.63	Product Not Found	0	14.52
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/20/2002	5.61	Product Not Found	0	14.54
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/21/2002	5.81	Diesel Sheen	0.01	14.34
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/22/2002	6.08	Diesel Sheen	0.01	14.07
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/23/2002	6.26	Diesel Sheen	0.01	13.89
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/24/2002	5.97	Product Not Found	0	14.18
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/26/2002	5.85	Product Not Found	0	14.30
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/27/2002	6.21	Product Not Found	0	13.94
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/28/2002	6.12	Product Not Found	0	14.03
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/29/2002	6.49	Product Not Found	0	13.66
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/30/2002	6.67	Diesel Sheen	0.01	13.48
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	08/31/2002	6.86	Product Not Found	0	13.29
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/02/2002	6.32	Product Not Found	0	13.83
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/03/2002	6.15	Product Not Found	0	14.00
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/11/2002	6.73	Product Not Found	0	13.42
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/12/2002	6.93	Product Not Found	0	13.22
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/13/2002	6.87	Product Not Found	0	13.28
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/14/2002	6.06	Product Not Found	0	14.09
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/16/2002	6.38	Product Not Found	0	13.77
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/17/2002	6.61	Product Not Found	0	13.54
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/18/2002	6.79	Diesel Sheen	0.01	13.36
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/19/2002	6.62	Product Not Found	0	13.53
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/20/2002	6.86	Product Not Found	0	13.29
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/21/2002	6.70	Product Not Found	0	13.45
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/23/2002	7.28	Diesel Sheen	0.01	12.87
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/24/2002	7.39	Product Not Found	0	12.76
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/25/2002	4.91	Product Not Found	0	15.24

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/26/2002	5.01	Product Not Found	0	15.14
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/27/2002	5.31	Product Not Found	0	14.84
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/28/2002	5.56	Product Not Found	0	14.59
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/30/2002	6.14	Diesel	0.01	14.01
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/01/2002	6.35	Product Not Found	0	13.80
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/02/2002	6.59	Product Not Found	0	13.56
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/03/2002	7.98	Product Not Found	0	12.17
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/03/2002	6.77	Product Not Found	0	13.38
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/04/2002	6.95	Diesel Sheen	0.01	13.20
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/05/2002	7.10	Diesel Sheen	0.01	13.05
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/07/2002	7.46	Diesel	0.01	12.69
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/08/2002	7.56	Product Not Found	0	12.59
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/09/2002	5.40	Product Not Found	0	14.75
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/10/2002	5.66	Product Not Found	0	14.49
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/11/2002	5.29	Product Not Found	0	14.86
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/12/2002	5.53	Product Not Found	0	14.62
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/14/2002	5.58	Product Not Found	0	14.57
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/15/2002	5.75	Product Not Found	0	14.40
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/16/2002	5.62	Product Not Found	0	14.53
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/17/2002	6.00	Product Not Found	0	14.15
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/18/2002	5.42	Product Not Found	0	14.73
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/19/2002	4.64	Product Not Found	0	15.51
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/21/2002	4.98	Product Not Found	0	15.17
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/22/2002	5.10	Product Not Found	0	15.05
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/23/2002	5.26	Product Not Found	0	14.89
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/24/2002	5.45	Diesel Sheen	0.01	14.70
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/25/2002	5.64	Product Not Found	0	14.51
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/26/2002	5.78	Product Not Found	0	14.37
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/28/2002	6.11	Product Not Found	0	14.04
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/29/2002	6.17	Product Not Found	0	13.98
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/30/2002	5.78	Diesel Sheen	0.01	14.37
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/31/2002	5.23	Product Not Found	0	14.92
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/01/2002	5.71	Product Not Found	0	14.44
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/02/2002	5.38	Product Not Found	0	14.77
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/04/2002	5.17	Product Not Found	0	14.98
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/05/2002	4.87	Product Not Found	0	15.28
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/06/2002	4.59	Product Not Found	0	15.56
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/07/2002	4.94	Product Not Found	0	15.21
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/08/2002	5.08	Product Not Found	0	15.07
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	11/09/2002	5.21	Product Not Found	0	14.94
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/09/2003	8.38	Product Not Found	0	11.77
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	10/14/2003	8.44	Product Not Found	0	11.71
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	09/15/2004	7.98	Unknown Odor	0	12.17
SWMU 17, Power Plant 3 Area	W-RWAY	6	R-6 (03-006)	MW	9/19/2005	6.82		0	13.33
SWMU 17, Power Plant 3 Area	W-RWAY	R-6	R-6 (03-006)	MW	9/16/2006	7.08		0.03	13.07
SWMU 17, Power Plant 3 Area	W-RWAY	R-6	R-6 (03-006)	MW	9/22/2007	5.15	Product Not Found	0	15.00
SWMU 17, Power Plant 3 Area	W-RWAY	R-6	R-6	MW	9/19/2008	8.63	Product Not Found	0	11.52
SWMU 17, Power Plant 3 Area	W-RWAY	R-6	R-6	MW	9/9/2009	7.11	DRO	0.01	13.04
SWMU 17, Power Plant 3 Area	W-RWAY	R-6	R-6	MW	9/9/2010	7.53	DRO	0.01	12.62
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	10/05/2001	17.27	Product Not Found	0	4.13

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	10/22/2002	16.85	Product Not Found	0	4.55
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	10/04/2003	17.06	Product Not Found	0	4.34
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	09/16/2004	17.47	Product Not Found	0	3.93
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	9/20/2005	17.22		0	4.18
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	9/13/2006	17.59	Product Not Found	0	3.81
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	9/22/2007	16.92	Product Not Found	0	4.48
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	9/18/2008	17.45	Product Not Found	0	3.95
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	9/5/2009	17.30	Product Not Found	0	4.10
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	9/6/2010	17.40	Product Not Found	0	4.00
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	9/3/2011	17.38	Product Not Found	0	4.02
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	9/11/2013	16.95	Product Not Found	0	4.45
SWMU 55, Public Transportation Dept. Waste Storage Area	55	145	55-145	MW	9/11/2013	16.95	Product Not Found	0	4.45
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	10/05/2001	17.81	Product Not Found	0	3.44
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	10/23/2002	17.42	Product Not Found	0	3.83
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	10/04/2003	16.88	Product Not Found	0	4.37
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	09/16/2004	19.36	Product Not Found	0	1.89
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	9/20/2005	18.88		0	2.37
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	9/13/2006	18.29	Product Not Found	0	2.96
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	9/18/2008	18.12	Product Not Found	0	3.13
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	9/5/2009	18.23	Product Not Found	0	3.02
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	9/6/2010	18.47	Product Not Found	TRACE	2.78
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	9/3/2011	18.02	Product Not Found	0	3.23
SWMU 55, Public Transportation Dept. Waste Storage Area	55	146	55-146	MW	9/11/2013	17.64	Product Not Found	0	3.61
SWMU 58 and SA 73, Heating Plant 6	NSGA	101	12-101	MW	08/03/2002	14.60			63.54
SWMU 58 and SA 73, Heating Plant 6	NSGA	101	12-101	MW	10/15/2003	14.81	Product Not Found	0	63.33
SWMU 58 and SA 73, Heating Plant 6	NSGA	101	12-101	MW	09/12/2004	14.07	Product Not Found	0	64.07
SWMU 58 and SA 73, Heating Plant 6	NSGA	101	12-101	MW	9/12/2005	14.05		0	64.09
SWMU 58 and SA 73, Heating Plant 6	NSGA	101	12-101	MW	9/21/2006	14.72	Product Not Found		63.42
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	08/03/2002	11.01	Undetermined	0.01	62.25
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	10/15/2003	10.79	Product Not Found	0	62.47
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	09/12/2004	8.76	Unknown Odor	0	64.50
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	9/11/2005	9.42		0	63.84
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	9/13/2006	10.62		0	62.64
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	9/27/2007	8.75	Product Not Found	0	64.51
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	9/15/2008	10.78	Product Not Found	0	62.48
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	9/7/2009	8.72	DRO	0.09	64.54
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	9/8/2010	10.53	Product Not Found	0	62.73
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	8/29/2011	10.84	Product Not Found	0	62.42
SWMU 58 and SA 73, Heating Plant 6	NSGA	105	12-105	MW	8/29/2012	10.78	Product Not Found	0	62.48
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	08/03/2002	10.78			62.21
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	10/15/2003	10.53	Product Not Found	0	62.46
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	09/12/2004	8.62	Product Not Found	0	64.37
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	9/12/2005	9.08		0	63.91
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	9/13/2006	10.34	Product Not Found	0	62.65
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	9/27/2007	8.51	Product Not Found	0	64.48
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	9/15/2008	10.54	Product Not Found	0	62.45
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	9/7/2009	8.45	Product Not Found	0	64.54
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	9/8/2010	10.27	Product Not Found	0	62.72
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	8/29/2011	10.60	Product Not Found	0	62.39
SWMU 58 and SA 73, Heating Plant 6	NSGA	106	12-106	MW	8/29/2012	10.54	Product Not Found	0	62.45

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 58 and SA 73, Heating Plant 6	NSGA	108	12-108	GW	09/19/2004	11.21	Product Not Found	0	61.94
SWMU 58 and SA 73, Heating Plant 6	NSGA	108	12-108	GW	9/12/2005	10.92		0	62.23
SWMU 58 and SA 73, Heating Plant 6	NSGA	108	12-108	GW	9/13/2006	11.78	Product Not Found	0	61.37
SWMU 58 and SA 73, Heating Plant 6	NSGA	108	12-108	GW	9/27/2007	10.91	Product Not Found	0	62.24
SWMU 58 and SA 73, Heating Plant 6	NSGA	108	12-108	GW	9/26/2008	11.81	DRO	0.01	61.34
SWMU 58 and SA 73, Heating Plant 6	NSGA	108	12-108	GW	9/7/2009	10.52	Product Not Found	0	62.63
SWMU 58 and SA 73, Heating Plant 6	NSGA	108	12-108	GW	9/8/2010	11.48	Product Not Found	0	61.67
SWMU 58 and SA 73, Heating Plant 6	NSGA	110	12-110	GW	09/19/2004	10.44	Undetermined	0.27	63.58
SWMU 58 and SA 73, Heating Plant 6	NSGA	110	12-110	GW	09/21/2004	10.44	Product Not Found	0	63.58
SWMU 58 and SA 73, Heating Plant 6	NSGA	110	12-110	GW	9/12/2005	10.79		0.5	63.23
SWMU 58 and SA 73, Heating Plant 6	NSGA	110	12-110	GW	9/21/2006	12.00		1.18	62.02
SWMU 58 and SA 73, Heating Plant 6	NSGA	110	12-110	GW	9/19/2007	9.38	DRO	0.47	64.64
SWMU 58 and SA 73, Heating Plant 6	NSGA	110	12-110	GW	9/26/2008	10.91	DRO	1.09	63.11
SWMU 58 and SA 73, Heating Plant 6	NSGA	114	12-114	MW	08/03/2002	10.36			60.61
SWMU 58 and SA 73, Heating Plant 6	NSGA	114	12-114	MW	10/15/2003	10.49	Product Not Found	0	60.48
SWMU 58 and SA 73, Heating Plant 6	NSGA	114	12-114	MW	09/12/2004	9.68	Product Not Found	0	61.29
SWMU 58 and SA 73, Heating Plant 6	NSGA	114	12-114	MW	9/11/2005	9.60		0	61.37
SWMU 58 and SA 73, Heating Plant 6	NSGA	114	12-114	MW	9/22/2006	10.43	Product Not Found	0	60.54
SWMU 58 and SA 73, Heating Plant 6	NSGA	114	12-114	MW	9/15/2008	10.30	Product Not Found	0	60.67
SWMU 58 and SA 73, Heating Plant 6	NSGA	114	12-114	MW	9/7/2009	9.21	NA	TRACE	61.76
SWMU 58 and SA 73, Heating Plant 6	NSGA	114	12-114	MW	9/8/2010	10.00	Product Not Found	0	60.97
SWMU 58 and SA 73, Heating Plant 6	NSGA	114	12-114	MW	8/29/2011	9.99	Product Not Found	0	60.98
SWMU 58 and SA 73, Heating Plant 6	NSGA	114	12-114	MW	8/29/2012	10.01	Product Not Found	0	60.96
SWMU 58 and SA 73, Heating Plant 6	NSGA	120	12-120	MW	08/03/2002	13.51			63.11
SWMU 58 and SA 73, Heating Plant 6	NSGA	120	12-120	MW	10/15/2003	13.68	Product Not Found	0	62.94
SWMU 58 and SA 73, Heating Plant 6	NSGA	120	12-120	MW	09/12/2004	12.87	Product Not Found	0	63.75
SWMU 58 and SA 73, Heating Plant 6	NSGA	120	12-120	MW	9/12/2005	12.81		0	63.81
SWMU 58 and SA 73, Heating Plant 6	NSGA	120	12-120	MW	9/21/2006	13.56	Product Not Found	0	63.06
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	08/03/2002	14.10	Undetermined	0.01	61.91
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	10/15/2003	14.63	Unknown Odor	0.32	61.38
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	09/12/2004	13.57	Unknown Odor	0	62.44
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	9/12/2005	13.57		0	62.44
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	9/21/2006	14.42		0.15	61.59
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	9/19/2007	12.77	Product Not Found	TRACE	63.24
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	9/15/2008	14.04	DRO	0.02	61.97
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	9/7/2009	12.88	Product Not Found	0	63.13
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	9/8/2010	13.88	DRO	0.01	62.13
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	8/29/2011	13.70	Product Not Found	0	62.31
SWMU 58 and SA 73, Heating Plant 6	NSGA	121	12-121	MW	8/29/2012	13.66	DRO	0.03	62.35
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	08/03/2002	13.64			63.44
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	10/15/2003	14.81	Product Not Found	0	62.27
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	09/12/2004	13.15	Unknown Odor	0	63.93
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	9/12/2005	12.88		0	64.20
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	9/13/2006	13.58	Product Not Found	0	63.50
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	9/27/2007	12.49	Product Not Found	0	64.59
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	9/15/2008	13.38	Product Not Found	0	63.70
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	9/7/2009	12.16	Product Not Found	0	64.92
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	9/8/2010	16.23	Product Not Found	0	60.85
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	8/29/2011	13.07	Product Not Found	0	64.01
SWMU 58 and SA 73, Heating Plant 6	NSGA	124	12-124	MW	8/29/2012	13.13	Product Not Found	0	63.95

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	08/03/2002	11.33			62.19
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	10/15/2003	11.44	Product Not Found	0	62.08
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	09/12/2004	10.71	Product Not Found	0	62.81
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	9/12/2005	9.71		0	63.81
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	9/13/2006	11.33	Product Not Found	0	62.19
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	9/27/2007	10.32	Product Not Found	0	63.20
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	9/15/2008	11.14	Product Not Found	0	62.38
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	9/7/2009	10.07	DRO	0.01	63.45
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	9/8/2010	11.01	Product Not Found	0	62.51
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	8/29/2011	10.82	Product Not Found	0	62.70
SWMU 58 and SA 73, Heating Plant 6	NSGA	125	12-125	RW	8/29/2012	10.93	Product Not Found	0	62.59
SWMU 58 and SA 73, Heating Plant 6	NSGA	201	12-201	GW	08/03/2002	10.71			61.27
SWMU 58 and SA 73, Heating Plant 6	NSGA	201	12-201	GW	09/19/2004	10.42	Product Not Found	0	61.56
SWMU 58 and SA 73, Heating Plant 6	NSGA	201	12-201	GW	9/12/2005	10.20		0	61.78
SWMU 58 and SA 73, Heating Plant 6	NSGA	201	12-201	GW	9/13/2006	10.94	Product Not Found	0	61.04
SWMU 58 and SA 73, Heating Plant 6	NSGA	201	12-201	GW	9/27/2007	10.07	Product Not Found	0	61.91
SWMU 58 and SA 73, Heating Plant 6	NSGA	201	12-201	GW	9/26/2008	11.01	Product Not Found	0	60.97
SWMU 58 and SA 73, Heating Plant 6	NSGA	201	12-201	GW	9/7/2009	9.78	Product Not Found	0	62.20
SWMU 58 and SA 73, Heating Plant 6	NSGA	201	12-201	GW	9/8/2010	10.64	Product Not Found	0	61.34
SWMU 58 and SA 73, Heating Plant 6	NSGA	202	12-202	GW	09/19/2004	10.42	Product Not Found	0	61.02
SWMU 58 and SA 73, Heating Plant 6	NSGA	202	12-202	GW	9/12/2005	10.02		0	61.42
SWMU 58 and SA 73, Heating Plant 6	NSGA	202	12-202	GW	9/13/2006	10.64	Product Not Found	0	60.80
SWMU 58 and SA 73, Heating Plant 6	NSGA	202	12-202	GW	9/27/2007	9.74	Product Not Found	0	61.70
SWMU 58 and SA 73, Heating Plant 6	NSGA	202	12-202	GW	9/26/2008	10.71	Product Not Found	0	60.73
SWMU 58 and SA 73, Heating Plant 6	NSGA	202	12-202	GW	9/7/2009	9.37	Product Not Found	0	62.07
SWMU 58 and SA 73, Heating Plant 6	NSGA	202	12-202	GW	9/8/2010	10.32	Product Not Found	0	61.12
SWMU 58 and SA 73, Heating Plant 6	NSGA	203	12-203	GW	09/19/2004	13.58	Undetermined	0.66	62.53
SWMU 58 and SA 73, Heating Plant 6	NSGA	203	12-203	GW	09/19/2004	13.58	Unknown Sheen	0	62.53
SWMU 58 and SA 73, Heating Plant 6	NSGA	203	12-203	GW	9/12/2005	13.70		0.79	62.41
SWMU 58 and SA 73, Heating Plant 6	NSGA	203	12-203	GW	9/21/2006	14.44		2.47	61.67
SWMU 58 and SA 73, Heating Plant 6	NSGA	203	12-203	GW	9/19/2007	12.17	DRO	0.83	63.94
SWMU 58 and SA 73, Heating Plant 6	NSGA	203	12-203	GW	9/15/2008	12.99	DRO	1.43	63.12
SWMU 58 and SA 73, Heating Plant 6	NSGA	203	12-203	GW	9/7/2009	11.42	DRO	0.81	64.69
SWMU 58 and SA 73, Heating Plant 6	NSGA	203	12-203	GW	9/8/2010	12.83	Product Not Found	0	63.28
SWMU 58 and SA 73, Heating Plant 6	NSGA	203	12-203	GW	8/29/2011	12.61	Product Not Found	0	63.50
SWMU 58 and SA 73, Heating Plant 6	NSGA	203	12-203	GW	8/29/2012	12.77	Product Not Found	0	63.24
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	09/24/2001	4.23	Product Not Found	0	59.52
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	08/04/2002	5.20			58.55
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	10/24/2002	3.84	Product Not Found	0	59.91
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	10/19/2003	4.92	Product Not Found	0	58.83
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	11/03/2003	4.51	Product Not Found	0	59.24
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	09/12/2004	4.15	Product Not Found	0	59.60
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	09/23/2004	7.40	Unknown Odor	0	56.35
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	9/12/2005	3.99		0	59.76
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	9/22/2006	4.86	Product Not Found	0	58.89
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	9/19/2007	3.70	Product Not Found	0	60.05
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	9/15/2008	5.02	DRO	0.01	58.73
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	9/7/2009	3.73	DRO	0.01	60.02
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	9/8/2010	4.36	Product Not Found	0	59.39
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	8/29/2011	4.27	Product Not Found	0	59.48

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 58 and SA 73, Heating Plant 6	NSGA	601	12-601	MW	8/29/2012	4.40	Product Not Found	0	59.35
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	09/24/2001	10.37	Product Not Found	0	36.02
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	10/24/2002	12.80	Product Not Found	0	33.59
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	10/19/2003	11.15	Product Not Found	0	35.24
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	11/03/2003	12.42	Product Not Found	0	33.97
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	09/12/2004	9.59	Product Not Found	0	36.80
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	09/23/2004	10.47	Unknown Odor	0	35.92
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	9/12/2005	10.00		0	36.39
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	9/22/2006	11.21	Product Not Found	0	35.18
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	9/15/2008	10.93	Product Not Found	0	35.46
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	9/7/2009	9.21	Product Not Found	0	37.18
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	9/8/2010	10.99	Product Not Found	0	35.40
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	8/1/2011	10.89	Product Not Found	0	35.50
SWMU 58 and SA 73, Heating Plant 6	NSGA	604	12-604	MW	8/29/2012	10.90	Product Not Found	0	35.49
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	09/24/2001	14.10			51.56
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	09/24/2001	14.35	Product Not Found	0	51.31
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	10/24/2002	16.65	Product Not Found	0	49.01
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	09/12/2004	16.44	Product Not Found	0	49.22
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	9/12/2005	16.43		0	49.23
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	9/13/2006	16.33	Product Not Found	0	49.33
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	9/27/2007	16.35	Product Not Found	0	49.31
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	9/15/2008	16.34	Product Not Found	0	49.32
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	9/7/2009	16.35	Product Not Found	0	49.31
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	9/8/2010	16.35	Product Not Found	0	49.31
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	8/29/2011	16.38	Product Not Found	0	49.28
SWMU 58 and SA 73, Heating Plant 6	NSGA	610	12-610	MW	8/29/2012	16.35	Product Not Found	0	49.31
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	06/08/2003	4.07	Product Not Found	0	54.04
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	10/19/2003	4.41	Product Not Found	0	53.70
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	11/03/2003	4.30	Product Not Found	0	53.81
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	09/12/2004	3.91	Product Not Found	0	54.20
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	09/23/2004	5.33	Unknown Odor	0	52.78
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	9/12/2005	3.88		0	54.23
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	9/22/2006	4.38	Product Not Found	0	53.73
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	9/19/2007	3.59	Product Not Found	0	54.52
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	9/15/2008	4.03	Product Not Found	0	54.08
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	9/7/2009	3.55	Product Not Found	0	54.56
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	9/8/2010	4.10	Product Not Found	0	54.01
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	8/29/2011	4.01	Product Not Found	0	54.10
SWMU 58 and SA 73, Heating Plant 6	NSGA	611	12-611	MW	8/29/2012	4.08	Product Not Found	0	54.03
SWMU 60, Tank Farm A			650		9/2/2011	10.53	Product Not Found	0	2.58
SWMU 60, Tank Farm A			650		9/5/2012	10.09	Product Not Found	0	3.02
SWMU 60, Tank Farm A			650		8/30/2013	10.00	Product Not Found	0	3.11
SWMU 60, Tank Farm A			651		9/2/2011	9.49	Product Not Found	0	2.59
SWMU 60, Tank Farm A			651		9/5/2012	9.11	Product Not Found	0	2.97
SWMU 60, Tank Farm A			651		8/30/2013	9.10	Product Not Found	0	2.98
SWMU 60, Tank Farm A			652		9/2/2011	9.83	DRO	0.19	2.54
SWMU 60, Tank Farm A			652		9/5/2012	9.40	Product Not Found	0	2.97
SWMU 60, Tank Farm A			652		8/30/2013	9.53	DRO	0.03	2.84
SWMU 60, Tank Farm A			653		9/2/2011	11.82	DRO	0.6	3.28
SWMU 60, Tank Farm A			653		9/5/2012	10.15	DRO	0.01	4.95

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 60, Tank Farm A			653		8/30/2013	11.75	DRO	0.05	3.35
SWMU 60, Tank Farm A	TFA	51	LC5A	MW	9/16/2006	6.52	Product Not Found	0	4.34
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	09/28/2001	5.96	Product Not Found	0	4.90
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	10/04/2002	5.58	Product Not Found	0	5.28
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	10/07/2003	6.49	Product Not Found	0	4.37
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	11/11/2003	5.15	Product Not Found	0	5.71
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	09/17/2004	6.60	Unknown Odor	0	4.26
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	09/17/2004	6.53	Product Not Found	0	4.33
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	9/15/2005	5.67		0	5.19
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	9/15/2007	5.38		0.01	5.48
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	9/9/2008	6.93	Product Not Found	0	3.93
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	8/31/2009	5.80	Product Not Found	0	5.06
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	9/1/2010	7.48	Product Not Found	0	3.38
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	9/2/2011	7.36	Product Not Found	0	3.50
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	9/5/2012	6.23	Product Not Found	0	4.63
SWMU 60, Tank Farm A	TFA	51	LC5A (OLD 1)	MW	8/30/2013	6.95	Product Not Found	0	3.91
SWMU 60, Tank Farm A	TFA	706	MW E006	MW	9/16/2006	6.38	Product Not Found	0	150.04
SWMU 60, Tank Farm A	TFA	706	E006,MW-006,AMW	MW	09/28/2001	6.60	Product Not Found	0	149.82
SWMU 60, Tank Farm A	TFA	706	E006,MW-006,AMW	MW	10/05/2002	18.44	Product Not Found	0	137.98
SWMU 60, Tank Farm A	TFA	706	E006,MW-006,AMW	MW	10/07/2003	6.71	Product Not Found	0	149.71
SWMU 60, Tank Farm A	TFA	706	E006,MW-006,AMW	MW	11/11/2003	6.43	Product Not Found	0	149.99
SWMU 60, Tank Farm A	TFA	706	E006,MW-006,AMW	MW	09/17/2004	8.93	Unknown Odor	0	147.49
SWMU 60, Tank Farm A	TFA	706	E006,MW-006,AMW	MW	9/15/2005	8.81		0	147.61
SWMU 60, Tank Farm A	TFA	706	E006,MW-006,AMW	MW	9/14/2007	6.15	Product Not Found	0	150.27
SWMU 60, Tank Farm A	TFA	706	E006,MW-006,AMW	MW	9/9/2008	7.32	Product Not Found	0	149.10
SWMU 60, Tank Farm A	TFA	706	MW E006	MW	8/31/2009	6.41	Product Not Found	0	150.01
SWMU 60, Tank Farm A	TFA	706	MW E006	MW	9/1/2010	7.22	Product Not Found	0	149.20
SWMU 60, Tank Farm A	TFA	706	MW E006	MW	9/2/2011	7.37	Product Not Found	0	149.05
SWMU 60, Tank Farm A	TFA	706	MW E006	MW	9/5/2012	6.07	Product Not Found	0	150.35
SWMU 60, Tank Farm A	TFA	706	MW E006	MW	8/30/2013	6.38	Product Not Found	0	150.04
SWMU 60, Tank Farm A	TFA		E-501	MW	9/9/2008	5.93	Product Not Found	0	30.02
SWMU 61, Tank Farm B	TFB	113	14-113	MW	10/07/2003	3.22	Product Not Found	0	6.25
SWMU 61, Tank Farm B	TFB	113	14-113	MW	11/12/2003	3.22	Product Not Found	0	6.25
SWMU 61, Tank Farm B	TFB	113	14-113	MW	09/17/2004	5.00	Unknown Odor	0	4.47
SWMU 61, Tank Farm B	TFB	113	14-113	MW	9/16/2005	3.00		0	6.47
SWMU 61, Tank Farm B	TFB	113	14-113		9/12/2006	3.18		0	6.29
SWMU 61, Tank Farm B	TFB	113	14-113		9/12/2007	3.04	Product Not Found	0	6.43
SWMU 61, Tank Farm B	TFB	113	14-113		9/9/2008	3.45	Product Not Found	0	6.02
SWMU 61, Tank Farm B	TFB	113	14-113		9/17/2009	3.00	Product Not Found	0	6.14
SWMU 61, Tank Farm B	TFB	113	14-113		9/3/2010	3.15	Product Not Found	0	5.99
SWMU 61, Tank Farm B	TFB	113	14-113		9/2/2011	3.42	Product Not Found	0	5.72
SWMU 61, Tank Farm B	TFB	113	14-113		9/6/2012	3.07	Product Not Found	0	6.07
SWMU 61, Tank Farm B	TFB	113	14-113		9/6/2013	3.39	Product Not Found	0	5.75
SWMU 61, Tank Farm B	TFB	210	14-210	MW	10/06/2001	2.22	Product Not Found	0	9.90
SWMU 61, Tank Farm B	TFB	210	14-210	MW	10/07/2002	3.14	Product Not Found	0	8.98
SWMU 61, Tank Farm B	TFB	210	14-210	MW	10/07/2003	3.70	Product Not Found	0	8.42
SWMU 61, Tank Farm B	TFB	210	14-210	MW	09/17/2004	7.22	Product Not Found	0	4.90
SWMU 61, Tank Farm B	TFB	210	14-210	MW	9/16/2005	4.12		0	8.00
SWMU 61, Tank Farm B	TFB	210	14-210		9/12/2006	3.33		0	8.79
SWMU 61, Tank Farm B	TFB	210	14-210		9/8/2007	2.15	Product Not Found	0	9.97

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 61, Tank Farm B	TFB	210	14-210		9/9/2008	3.85	Product Not Found	0	8.27
SWMU 61, Tank Farm B	TFB	210	14-210		9/17/2009	3.10	Product Not Found	0	9.02
SWMU 61, Tank Farm B	TFB	210	14-210		9/3/2010	3.66	Product Not Found	0	8.46
SWMU 61, Tank Farm B	TFB	210	14-210		9/2/2011	3.63	Product Not Found	0	8.49
SWMU 61, Tank Farm B	TFB	210	14-210		9/1/2012	2.34	Product Not Found	0	9.78
SWMU 61, Tank Farm B	TFB	210	14-210		9/6/2013	2.76	Product Not Found	0	9.36
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B	MW	10/06/2001	4.10	Product Not Found	0	33.34
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B	MW	10/07/2002	3.92	Product Not Found	0	33.52
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B	MW	05/13/2003	3.96	Product Not Found	0	33.48
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B	MW	10/07/2003	5.60	Product Not Found	0	31.84
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B	MW	11/11/2003	5.21	Product Not Found	0	32.23
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B	MW	09/17/2004	6.25	Unknown Odor	0	31.19
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B	MW	9/16/2005	4.41		0	33.03
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B		9/12/2006	5.82		0	31.62
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B		9/8/2007	4.82	Product Not Found	0	32.62
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B		9/9/2008	4.84	Product Not Found	0	32.60
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B		9/17/2009	4.19	Product Not Found	0	33.25
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B		9/3/2010	5.05	Product Not Found	0	32.39
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B		9/5/2012	4.62	Product Not Found	0	32.82
SWMU 61, Tank Farm B	TFB	200	TFB-MW4B		9/6/2013	4.47	Product Not Found	0	32.97
SWMU 62, New Housing Fuel Leak	DOWNTOWN	12	03-012	MW	08/29/2001	7.64			1.63
SWMU 62, New Housing Fuel Leak	DOWNTOWN	12	03-012	MW	10/04/2001	7.61	Product Not Found	0	1.66
SWMU 62, New Housing Fuel Leak	DOWNTOWN	12	03-012	MW	10/01/2002	7.67	Product Not Found	0	1.60
SWMU 62, New Housing Fuel Leak	DOWNTOWN	12	03-012	MW	05/11/2003	7.40	Product Not Found	0	1.87
SWMU 62, New Housing Fuel Leak	DOWNTOWN	101	03-101	MW	08/29/2001	22.70	Diesel	0.27	3.31
SWMU 62, New Housing Fuel Leak	DOWNTOWN	101	03-101	MW	05/11/2002	21.93	Diesel	0.1	4.08
SWMU 62, New Housing Fuel Leak	DOWNTOWN	101	03-101	MW	10/14/2003	22.27	Product Not Found	0	3.74
SWMU 62, New Housing Fuel Leak	DOWNTOWN	101	03-101	MW	9/15/2006	23.10	Product Not Found	0	2.91
SWMU 62, New Housing Fuel Leak			03-101		9/24/2007	22.56	Product Not Found	0	3.45
SWMU 62, New Housing Fuel Leak			03-101		9/23/2008	22.95	Product Not Found	0	3.06
SWMU 62, New Housing Fuel Leak			03-101		9/4/2009	22.68	Product Not Found	0	3.33
SWMU 62, New Housing Fuel Leak			03-101		9/14/2010	22.89	GRO	0.01	3.12
SWMU 62, New Housing Fuel Leak			03-101		9/13/2011	22.79	Product Not Found	0	3.22
SWMU 62, New Housing Fuel Leak			03-101		9/10/2012	22.58	Product Not Found	0	3.43
SWMU 62, New Housing Fuel Leak			03-101		9/7/2013	22.43	Product Not Found	0	3.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	102	03-102	MW	08/29/2001	14.52	Diesel	0.38	2.75
SWMU 62, New Housing Fuel Leak	DOWNTOWN	102	03-102	MW	05/11/2002	13.63	Diesel Sheen	0.01	3.64
SWMU 62, New Housing Fuel Leak	DOWNTOWN	102	03-102	MW	10/14/2003	13.83	Product Not Found	0	3.44
SWMU 62, New Housing Fuel Leak	DOWNTOWN	102	03-102	MW	9/15/2006	14.90		0.21	2.37
SWMU 62, New Housing Fuel Leak			03-102		9/21/2007	14.73	DRO	3.01	2.54
SWMU 62, New Housing Fuel Leak			03-102		9/23/2008	14.58	Product Not Found	0	2.69
SWMU 62, New Housing Fuel Leak			03-102		9/4/2009	14.33	Product Not Found	0	2.94
SWMU 62, New Housing Fuel Leak			03-102		9/14/2010	14.54	Product Not Found	0	2.73
SWMU 62, New Housing Fuel Leak			03-102		9/13/2011	14.46	Product Not Found	0	2.81
SWMU 62, New Housing Fuel Leak			03-102		9/10/2012	14.22	Product Not Found	0	3.05
SWMU 62, New Housing Fuel Leak			03-102		9/7/2013	13.99	Product Not Found	0	3.28
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	05/30/2001	14.90			4.03
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	06/30/2001	15.55	Product Not Found	0	3.38
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	07/31/2001	15.55	Product Not Found	0	3.38
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	08/29/2001	16.05			2.88

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SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	08/31/2001	15.55	Product Not Found	0	3.38
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	09/01/2001	16.07			2.86
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	10/31/2001	15.55	Product Not Found	0	3.38
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	11/13/2001	15.22	Product Not Found	0	3.71
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	05/11/2002	15.52	Product Not Found	0	3.41
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	05/12/2002	15.43	Product Not Found	0	3.50
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	10/14/2003	15.59	Product Not Found	0	3.34
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	9/25/2006	16.62	Product Not Found	0	2.31
SWMU 62, New Housing Fuel Leak			03-103		9/22/2007	16.10	Product Not Found	0	2.83
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	9/23/2008	16.39	Product Not Found	0	2.54
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	9/4/2009	16.16	Product Not Found	0	2.77
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	9/14/2010	16.35	Product Not Found	0	2.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	9/13/2011	16.28	Product Not Found	0	2.65
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	9/10/2012	16.05	Product Not Found	0	2.88
SWMU 62, New Housing Fuel Leak	DOWNTOWN	103	03-103	MW	9/7/2013	15.78	Product Not Found	0	3.15
SWMU 62, New Housing Fuel Leak	DOWNTOWN	104	03-104	MW	08/29/2001	18.80			6.33
SWMU 62, New Housing Fuel Leak	DOWNTOWN	104	03-104	MW	09/27/2003	19.55	Product Not Found	0	5.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	104	03-104	MW	9/22/2006	20.44		0.05	4.69
SWMU 62, New Housing Fuel Leak			03-104		9/17/2007	19.64	Product Not Found	0	5.49
SWMU 62, New Housing Fuel Leak			03-104		9/22/2008	19.97	Product Not Found	0	5.16
SWMU 62, New Housing Fuel Leak			03-104		9/4/2009	19.35	Product Not Found	0	5.78
SWMU 62, New Housing Fuel Leak			03-104		9/13/2010	19.92	Product Not Found	0	5.21
SWMU 62, New Housing Fuel Leak			03-104		9/12/2011	19.41	Product Not Found	0	5.72
SWMU 62, New Housing Fuel Leak			03-104		9/8/2012	19.48	Product Not Found	0	5.65
SWMU 62, New Housing Fuel Leak			03-104		9/10/2013	19.80	Product Not Found	0	5.33
SWMU 62, New Housing Fuel Leak	DOWNTOWN	105	03-105	MW	08/29/2001	18.60			6.69
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	05/30/2001	25.61			5.69
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	06/30/2001	26.68	Product Not Found	0	4.62
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	07/31/2001	26.68	Product Not Found	0	4.62
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	08/29/2001	27.33	Diesel	0.01	3.97
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	08/31/2001	26.68	Product Not Found	0	4.62
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	09/01/2001	27.39			3.91
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	10/31/2001	26.68	Product Not Found	0	4.62
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	11/13/2001	26.72	Product Not Found	0	4.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	05/11/2002	26.67	Product Not Found	0	4.63
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	05/12/2002	26.64	Product Not Found	0	4.66
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	10/14/2003	27.28	Product Not Found	0	4.02
SWMU 62, New Housing Fuel Leak	DOWNTOWN	107	03-107	MW	9/15/2006	28.05	Product Not Found	0	3.25
SWMU 62, New Housing Fuel Leak			03-107		9/24/2007	27.46	Product Not Found	0	3.84
SWMU 62, New Housing Fuel Leak			03-107		9/23/2008	27.84	Product Not Found	0	3.46
SWMU 62, New Housing Fuel Leak			03-107		9/11/2009	27.55	Product Not Found	0	3.75
SWMU 62, New Housing Fuel Leak			03-107		9/14/2010	27.80	Product Not Found	0	3.50
SWMU 62, New Housing Fuel Leak			03-107		9/13/2011	27.64	Product Not Found	0	3.66
SWMU 62, New Housing Fuel Leak			03-107		9/10/2012	27.46	Product Not Found	0	3.84
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	05/30/2001	28.32			5.37
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	06/30/2001	29.39	Product Not Found	0	4.30
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	07/31/2001	29.39	Product Not Found	0	4.30
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	08/29/2001	29.98			3.71
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	08/31/2001	29.39	Product Not Found	0	4.30
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	09/01/2001	30.06			3.63

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	10/04/2001	30.11	Product Not Found	0	3.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	10/31/2001	29.39	Product Not Found	0	4.30
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	11/13/2001	29.11	Product Not Found	0	4.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	05/11/2002	29.97	Product Not Found	0	3.72
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	05/12/2002	29.31	Product Not Found	0	4.38
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	10/02/2002	29.92	Product Not Found	0	3.77
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	10/14/2003	29.87	Product Not Found	0	3.82
SWMU 62, New Housing Fuel Leak	DOWNTOWN	109	03-109	MW	9/25/2006	30.77	Product Not Found	0	2.92
SWMU 62, New Housing Fuel Leak			03-109		9/21/2007	29.91	Product Not Found	0	3.78
SWMU 62, New Housing Fuel Leak			03-109		9/23/2008	30.40	Product Not Found	0	3.29
SWMU 62, New Housing Fuel Leak			03-109		9/9/2009	30.18	DRO	0.01	3.51
SWMU 62, New Housing Fuel Leak			03-109		9/14/2010	30.46	Product Not Found	0	3.23
SWMU 62, New Housing Fuel Leak			03-109		9/13/2011	30.31	Product Not Found	0	3.38
SWMU 62, New Housing Fuel Leak			03-109		9/10/2012	30.07	Product Not Found	0	3.62
SWMU 62, New Housing Fuel Leak			03-109		9/7/2013	30.03	Product Not Found	0	3.66
SWMU 62, New Housing Fuel Leak	DOWNTOWN	155	03-155	MW	05/10/2003	18.23	Product Not Found	0	8.04
SWMU 62, New Housing Fuel Leak	DOWNTOWN	155	03-155	MW	09/29/2003	19.63	Product Not Found	0	6.64
SWMU 62, New Housing Fuel Leak	DOWNTOWN	155	03-155	MW	11/03/2003	20.00	Product Not Found	0	6.27
SWMU 62, New Housing Fuel Leak	DOWNTOWN	155	03-155	MW	09/13/2004	19.41	Unknown Odor	0	6.86
SWMU 62, New Housing Fuel Leak	DOWNTOWN	155	03-155	MW	9/22/2005	19.11		0	7.16
SWMU 62, New Housing Fuel Leak	DOWNTOWN	155	03-155	MW	9/22/2006	19.99	Product Not Found	0	6.28
SWMU 62, New Housing Fuel Leak			03-155		9/18/2007	19.21	Product Not Found	0	7.06
SWMU 62, New Housing Fuel Leak			03-155		9/22/2008	19.33	Product Not Found	0	6.94
SWMU 62, New Housing Fuel Leak			03-155		9/4/2009	18.69	Product Not Found	0	7.58
SWMU 62, New Housing Fuel Leak			03-155		9/13/2010	19.40	Product Not Found	0	6.87
SWMU 62, New Housing Fuel Leak			03-155		9/12/2011	18.91	Product Not Found	0	7.36
SWMU 62, New Housing Fuel Leak			03-155		9/8/2012	18.93	Product Not Found	0	7.34
SWMU 62, New Housing Fuel Leak			03-155		9/10/2013	19.31	Product Not Found	0	6.96
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	09/19/2001	20.10	Product Not Found	0	8.47
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	10/07/2001	21.47	Product Not Found	0	7.10
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	11/02/2001	19.12	Product Not Found	0	9.45
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	05/11/2002	20.04	Product Not Found	0	8.53
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	05/17/2002	20.03	Product Not Found	0	8.54
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	05/24/2002	20.19	Product Not Found	0	8.38
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	05/31/2002	20.18	Product Not Found	0	8.39
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	06/07/2002	20.32	Product Not Found	0	8.25
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	06/14/2002	20.36	Product Not Found	0	8.21
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	06/21/2002	20.40	Product Not Found	0	8.17
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	06/28/2002	20.59	Product Not Found	0	7.98
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	07/05/2002	20.71	Product Not Found	0	7.86
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	07/12/2002	20.84	Product Not Found	0	7.73
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	07/19/2002	20.96	Product Not Found	0	7.61
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	07/26/2002	21.11	Product Not Found	0	7.46
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	08/02/2002	21.29	Product Not Found	0	7.28
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	08/09/2002	21.43	Product Not Found	0	7.14
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	08/16/2002	21.51	Product Not Found	0	7.06
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	08/23/2002	22.54	Product Not Found	0	6.03
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	08/30/2002	21.60	Product Not Found	0	6.97
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	09/06/2002	22.63	Product Not Found	0	5.94
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	09/13/2002	22.73	Product Not Found	0	5.84

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	09/20/2002	22.65	Product Not Found	0	5.92
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	09/27/2002	21.66	Product Not Found	0	6.91
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	10/04/2002	21.54	Product Not Found	0	7.03
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	10/11/2002	21.53	Product Not Found	0	7.04
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	10/11/2002	21.54	Product Not Found	0	7.03
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	10/18/2002	22.39	Product Not Found	0	6.18
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	10/25/2002	21.27	Product Not Found	0	7.30
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	11/01/2002	21.17	Product Not Found	0	7.40
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	11/08/2002	21.13	Product Not Found	0	7.44
SWMU 62, New Housing Fuel Leak	DOWNTOWN	422	03-422	MW	05/09/2003	20.54	Product Not Found	0	8.03
SWMU 62, New Housing Fuel Leak			03-502		9/25/2006	27.89	Product Not Found	0	0.27
SWMU 62, New Housing Fuel Leak			03-502		9/21/2007	27.20	Product Not Found	0	0.96
SWMU 62, New Housing Fuel Leak			03-502		9/26/2008	24.92	Product Not Found	0	3.12
SWMU 62, New Housing Fuel Leak			03-502		9/9/2009	24.62	Product Not Found	0	3.42
SWMU 62, New Housing Fuel Leak			03-502		9/14/2010	24.82	Product Not Found	0	3.22
SWMU 62, New Housing Fuel Leak			03-502		9/13/2011	24.71	Product Not Found	0	3.33
SWMU 62, New Housing Fuel Leak			03-502		9/10/2012	24.00	Product Not Found	0	4.04
SWMU 62, New Housing Fuel Leak			03-502		9/7/2013	24.40	Product Not Found	0	3.64
SWMU 62, New Housing Fuel Leak	DOWNTOWN	518	03-518	MW	08/29/2001	27.28	Diesel	0.32	3.76
SWMU 62, New Housing Fuel Leak	DOWNTOWN	518	03-518	MW	05/11/2002	26.32	Diesel Sheen	0.01	4.72
SWMU 62, New Housing Fuel Leak	DOWNTOWN	518	03-518	MW	10/14/2003	27.14	Unknown Odor	0.48	3.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	518	03-518	MW	9/15/2006	29.07		1.55	1.97
SWMU 62, New Housing Fuel Leak			03-518		9/24/2007	27.19	DRO	0.23	3.85
SWMU 62, New Housing Fuel Leak			03-518		9/23/2008	27.56	DRO	0.13	3.48
SWMU 62, New Housing Fuel Leak			03-518		9/4/2009	27.22	Product Not Found	0	3.82
SWMU 62, New Housing Fuel Leak			03-518		9/14/2010	27.52	GRO	0.09	3.52
SWMU 62, New Housing Fuel Leak			03-518		9/13/2011	27.35	Product Not Found	0	3.69
SWMU 62, New Housing Fuel Leak			03-518		9/10/2012	27.18	Product Not Found	0	3.86
SWMU 62, New Housing Fuel Leak	DOWNTOWN	522	03-522	MW	05/11/2002	23.11	Product Not Found	0	4.87
SWMU 62, New Housing Fuel Leak	DOWNTOWN	606	03-606	AW	08/29/2001	20.01			
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	05/30/2001	13.03			10.32
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	06/30/2001	14.57	Product Not Found	0	8.78
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	07/31/2001	14.57	Product Not Found	0	8.78
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	08/29/2001	15.90			7.45
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	08/31/2001	14.57	Product Not Found	0	8.78
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	09/01/2001	15.96			7.39
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	10/08/2001	16.25	Product Not Found	0	7.10
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	10/31/2001	14.57	Product Not Found	0	8.78
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	11/13/2001	15.34	Product Not Found	0	8.01
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	05/12/2002	14.49	Product Not Found	0	8.86
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	10/01/2002	16.21	Product Not Found	0	7.14
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	05/10/2003	15.09	Product Not Found	0	8.26
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	09/27/2003	17.10	Product Not Found	0	6.25
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	09/29/2003	17.08	Product Not Found	0	6.27
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	11/03/2003	17.40	Product Not Found	0	5.95
SWMU 62, New Housing Fuel Leak	DOWNTOWN	619	03-619	MW	09/13/2004	16.78	Unknown Odor	0	6.57
SWMU 62, New Housing Fuel Leak			03-619		9/18/2007	16.66	Product Not Found	0	6.69
SWMU 62, New Housing Fuel Leak			03-619		9/22/2008	16.66	Product Not Found	0	6.69
SWMU 62, New Housing Fuel Leak			03-619		9/4/2009	16.09	Product Not Found	0	7.26
SWMU 62, New Housing Fuel Leak			03-619		9/13/2010	16.80	Product Not Found	0	6.55

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak			03-619		9/12/2011	16.29	Product Not Found	0	7.06
SWMU 62, New Housing Fuel Leak			03-619		9/8/2012	16.34	Product Not Found	0	7.01
SWMU 62, New Housing Fuel Leak			03-619		9/10/2013	16.65	Product Not Found	0	6.60
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	05/30/2001	4.89			20.99
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	06/30/2001	4.25	Product Not Found	0	21.63
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	07/31/2001	4.25	Product Not Found	0	21.63
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	08/29/2001	5.60			20.28
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	08/31/2001	4.25	Product Not Found	0	21.63
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	09/01/2001	5.62			20.26
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	10/08/2001	4.33	Product Not Found	0	21.55
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	10/31/2001	4.25	Product Not Found	0	21.63
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	11/13/2001	3.39	Product Not Found	0	22.49
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	05/12/2002	4.01	Product Not Found	0	21.87
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	10/02/2002	4.52	Product Not Found	0	21.36
SWMU 62, New Housing Fuel Leak	DOWNTOWN	695	03-695	MW	09/27/2003	4.80	Product Not Found	0	21.08
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	05/30/2001	15.47			10.60
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	06/30/2001	17.26	Product Not Found	0	8.81
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	07/31/2001	17.26	Product Not Found	0	8.81
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	08/29/2001	18.42			7.65
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	08/31/2001	17.26	Product Not Found	0	8.81
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	09/01/2001	18.51			7.56
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	10/08/2001	18.87	Product Not Found	0	7.20
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	10/31/2001	17.26	Product Not Found	0	8.81
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	11/13/2001	17.91	Product Not Found	0	8.16
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	05/12/2002	17.09	Product Not Found	0	8.98
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	10/02/2002	18.82	Product Not Found	0	7.25
SWMU 62, New Housing Fuel Leak	DOWNTOWN	696	03-696	MW	9/15/2006	19.87	Product Not Found	0	6.20
SWMU 62, New Housing Fuel Leak			03-696		9/15/2007	19.39	Product Not Found	0	6.68
SWMU 62, New Housing Fuel Leak			03-696		9/22/2008	19.27	Product Not Found	0	6.80
SWMU 62, New Housing Fuel Leak			03-696		9/4/2009	18.31	Product Not Found	0	7.76
SWMU 62, New Housing Fuel Leak			03-696		9/13/2010	19.35	Product Not Found	0	6.72
SWMU 62, New Housing Fuel Leak			03-696		9/12/2011	8.81	Product Not Found	0	7.26
SWMU 62, New Housing Fuel Leak	DOWNTOWN	697	03-697	MW	10/14/2001	24.65	Product Not Found	0	5.35
SWMU 62, New Housing Fuel Leak	DOWNTOWN	697	03-697	MW	10/02/2002	24.81	Product Not Found	0	5.19
SWMU 62, New Housing Fuel Leak	DOWNTOWN	697	03-697	MW	9/23/2006	25.94	Product Not Found	0	4.06
SWMU 62, New Housing Fuel Leak			03-697		9/15/2007	25.39	Product Not Found	0	4.61
SWMU 62, New Housing Fuel Leak			03-697		9/22/2008	25.28	Product Not Found	0	4.72
SWMU 62, New Housing Fuel Leak			03-697		9/4/2009	24.63	Product Not Found	0	5.37
SWMU 62, New Housing Fuel Leak			03-697		9/13/2010	25.34	Product Not Found	0	4.66
SWMU 62, New Housing Fuel Leak			03-697		9/12/2011	24.80	Product Not Found	0	5.20
SWMU 62, New Housing Fuel Leak			03-716		9/23/2006	NL			NM
SWMU 62, New Housing Fuel Leak	DOWNTOWN	778	03-778	MW	05/30/2001	16.74			8.56
SWMU 62, New Housing Fuel Leak	DOWNTOWN	778	03-778	MW	06/30/2001	18.09	Product Not Found	0	7.21
SWMU 62, New Housing Fuel Leak	DOWNTOWN	778	03-778	MW	07/31/2001	18.09	Product Not Found	0	7.21
SWMU 62, New Housing Fuel Leak	DOWNTOWN	778	03-778	MW	08/29/2001	19.04			6.26
SWMU 62, New Housing Fuel Leak	DOWNTOWN	778	03-778	MW	08/31/2001	18.09	Product Not Found	0	7.21
SWMU 62, New Housing Fuel Leak	DOWNTOWN	778	03-778	MW	09/01/2001	19.09			6.21
SWMU 62, New Housing Fuel Leak	DOWNTOWN	778	03-778	MW	10/31/2001	18.09	Product Not Found	0	7.21
SWMU 62, New Housing Fuel Leak	DOWNTOWN	778	03-778	MW	11/13/2001	18.46	Product Not Found	0	6.84
SWMU 62, New Housing Fuel Leak	DOWNTOWN	778	03-778	MW	05/12/2002	18.04	Product Not Found	0	7.26

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak	DOWNTOWN	778	03-778	MW	9/22/2006	20.45	Product Not Found	0	4.85
SWMU 62, New Housing Fuel Leak			03-778		9/18/2007	19.64	Product Not Found	0	5.66
SWMU 62, New Housing Fuel Leak			03-778		9/22/2008	20.06	Product Not Found	0	5.24
SWMU 62, New Housing Fuel Leak			03-778		9/4/2009	19.40	Product Not Found	0	5.90
SWMU 62, New Housing Fuel Leak			03-778		9/13/2010	19.99	Product Not Found	0	5.31
SWMU 62, New Housing Fuel Leak			03-778		9/12/2011	19.54	Product Not Found	0	5.76
SWMU 62, New Housing Fuel Leak			03-778		9/8/2012	19.53	Product Not Found	0	5.77
SWMU 62, New Housing Fuel Leak			03-778		9/10/2013	19.85	Product Not Found	0	5.45
SWMU 62, New Housing Fuel Leak	DOWNTOWN	802	03-802	MW	08/30/2001	19.04			4.13
SWMU 62, New Housing Fuel Leak	DOWNTOWN	802	03-802	MW	9/23/2006	17.59	Product Not Found	0	5.58
SWMU 62, New Housing Fuel Leak			03-802		9/20/2007	16.89	Product Not Found	0	6.28
SWMU 62, New Housing Fuel Leak			03-802		9/22/2008	17.01	Product Not Found	0	6.16
SWMU 62, New Housing Fuel Leak			03-802		9/4/2009	16.28	Product Not Found	0	6.89
SWMU 62, New Housing Fuel Leak			03-802		9/13/2010	16.97	Product Not Found	0	6.20
SWMU 62, New Housing Fuel Leak			03-802		9/12/2011	16.42	Product Not Found	0	6.75
SWMU 62, New Housing Fuel Leak			03-802		9/8/2012	16.60	Product Not Found	0	6.57
SWMU 62, New Housing Fuel Leak	DOWNTOWN	807	03-807	MW	05/30/2001	15.31	Product Not Found	0	9.49
SWMU 62, New Housing Fuel Leak	DOWNTOWN	807	03-807	MW	06/30/2001	15.92	Product Not Found	0	8.88
SWMU 62, New Housing Fuel Leak	DOWNTOWN	807	03-807	MW	09/01/2001	17.11			7.69
SWMU 62, New Housing Fuel Leak	DOWNTOWN	807	03-807	MW	11/13/2001	16.79	Product Not Found	0	8.01
SWMU 62, New Housing Fuel Leak	DOWNTOWN	808	03-808	MW	05/30/2001	15.31			8.44
SWMU 62, New Housing Fuel Leak	DOWNTOWN	808	03-808	MW	06/30/2001	15.92	Product Not Found	0	7.83
SWMU 62, New Housing Fuel Leak	DOWNTOWN	808	03-808	MW	07/31/2001	15.92	Product Not Found	0	7.83
SWMU 62, New Housing Fuel Leak	DOWNTOWN	808	03-808	MW	08/31/2001	15.92	Product Not Found	0	7.83
SWMU 62, New Housing Fuel Leak	DOWNTOWN	808	03-808	MW	10/31/2001	15.92	Product Not Found	0	7.83
SWMU 62, New Housing Fuel Leak	DOWNTOWN	808	03-808	MW	11/13/2001	16.79	Product Not Found	0	6.96
SWMU 62, New Housing Fuel Leak	DOWNTOWN	808	03-808	MW	9/23/2006	NL	Product Not Found	0	NM
SWMU 62, New Housing Fuel Leak	DOWNTOWN	895	03-895	MW	10/08/2001	21.37	Product Not Found	0	4.84
SWMU 62, New Housing Fuel Leak	DOWNTOWN	895	03-895	MW	10/01/2002	21.51	Product Not Found	0	4.70
SWMU 62, New Housing Fuel Leak	DOWNTOWN	895	03-895	MW	9/22/2006	22.39	Product Not Found	0	3.82
SWMU 62, New Housing Fuel Leak			03-895		9/17/2007	21.62	Product Not Found	0	4.59
SWMU 62, New Housing Fuel Leak			03-895		9/22/2008	22.07	Product Not Found	0	4.14
SWMU 62, New Housing Fuel Leak			03-895		9/4/2009	21.58	NA	TRACE	4.63
SWMU 62, New Housing Fuel Leak			03-895		9/13/2010	22.02	Product Not Found	0	4.19
SWMU 62, New Housing Fuel Leak			03-895		9/12/2011	21.67	Product Not Found	0	4.54
SWMU 62, New Housing Fuel Leak			03-895		9/8/2012	21.54	Product Not Found	0	4.67
SWMU 62, New Housing Fuel Leak	DOWNTOWN	896	03-896	MW	10/08/2001	15.80	Product Not Found	0	6.94
SWMU 62, New Housing Fuel Leak	DOWNTOWN	896	03-896	MW	10/03/2002	16.22	Product Not Found	0	6.52
SWMU 62, New Housing Fuel Leak	DOWNTOWN	897	03-897	MW	10/08/2001	16.35	Product Not Found	0	7.18
SWMU 62, New Housing Fuel Leak	DOWNTOWN	897	03-897	MW	10/02/2002	16.38	Product Not Found	0	7.15
SWMU 62, New Housing Fuel Leak	DOWNTOWN	898	03-898	MW	08/29/2001	13.09			1.74
SWMU 62, New Housing Fuel Leak	DOWNTOWN	898	03-898	MW	10/04/2001	13.04	Product Not Found	0	1.79
SWMU 62, New Housing Fuel Leak	DOWNTOWN	898	03-898	MW	05/11/2002	12.60	Product Not Found	0	2.23
SWMU 62, New Housing Fuel Leak	DOWNTOWN	898	03-898	MW	9/25/2006	13.42	Product Not Found	0	1.41
SWMU 62, New Housing Fuel Leak			03-898		9/22/2007	12.99	Product Not Found	0	1.84
SWMU 62, New Housing Fuel Leak			03-898		9/23/2008	13.30	Product Not Found	0	1.53
SWMU 62, New Housing Fuel Leak			03-898		9/4/2009	13.15	DRO	0.01	1.68
SWMU 62, New Housing Fuel Leak			03-898		9/14/2010	13.26	Product Not Found	0	1.57
SWMU 62, New Housing Fuel Leak			03-898		9/13/2011	13.22	Product Not Found	0	1.61
SWMU 62, New Housing Fuel Leak			03-898		9/13/2011	13.22	Product Not Found	0	1.61

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak			03-898		9/10/2012	13.02	Product Not Found	0	1.81
SWMU 62, New Housing Fuel Leak			03-898		9/7/2013	12.46	Product Not Found	0	2.37
SWMU 62, New Housing Fuel Leak	DOWNTOWN	553	AMW-704	MW	08/29/2001	7.11			1.10
SWMU 62, New Housing Fuel Leak	DOWNTOWN	553	AMW-704	MW	10/04/2001	7.04	Product Not Found	0	1.17
SWMU 62, New Housing Fuel Leak	DOWNTOWN	553	AMW-704	MW	05/11/2002	6.73	Product Not Found	0	1.48
SWMU 62, New Housing Fuel Leak	DOWNTOWN	553	AMW-704	MW	10/01/2002	7.10	Product Not Found	0	1.11
SWMU 62, New Housing Fuel Leak	DOWNTOWN	553	AMW-704	MW	05/11/2003	6.71	Product Not Found	0	1.50
SWMU 62, New Housing Fuel Leak	DOWNTOWN	553	AMW-704	MW	9/25/2006	7.36	Product Not Found	0	0.85
SWMU 62, New Housing Fuel Leak			AMW-704		9/22/2007	7.11	Product Not Found	0	1.10
SWMU 62, New Housing Fuel Leak			AMW-704		9/23/2008	7.28	Product Not Found	0	0.93
SWMU 62, New Housing Fuel Leak			AMW-704		9/4/2009	7.11	Product Not Found	0	1.10
SWMU 62, New Housing Fuel Leak			AMW-704		9/14/2010	7.23	Product Not Found	0	0.98
SWMU 62, New Housing Fuel Leak			AMW-704		9/13/2011	7.11	Product Not Found	0	1.10
SWMU 62, New Housing Fuel Leak			AMW-704		9/10/2012	7.09	Product Not Found	0	1.12
SWMU 62, New Housing Fuel Leak			AMW-704		9/7/2013	6.51	Product Not Found	0	1.70
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	05/30/2001	6.41			3.44
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	06/30/2001	6.94	Product Not Found	0	2.91
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	07/31/2001	6.94	Product Not Found	0	2.91
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	08/29/2001	7.40			2.45
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	08/31/2001	6.94	Product Not Found	0	2.91
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	09/01/2001	7.99			1.86
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	10/31/2001	6.94	Product Not Found	0	2.91
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	11/13/2001	6.81	Product Not Found	0	3.04
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	05/11/2002	6.86	Product Not Found	0	2.99
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	05/12/2002	6.81	Product Not Found	0	3.04
SWMU 62, New Housing Fuel Leak	DOWNTOWN	554	CTO124-MW13	MW	10/14/2003	6.83	Undetermined	0.01	3.02
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	05/30/2001	9.96			3.78
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	06/30/2001	10.54	Product Not Found	0	3.20
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	07/31/2001	10.54	Product Not Found	0	3.20
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	08/29/2001	11.07			2.67
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	08/31/2001	10.54	Product Not Found	0	3.20
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	09/01/2001	11.11			2.63
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	10/31/2001	10.54	Product Not Found	0	3.20
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	11/13/2001	10.39	Product Not Found	0	3.35
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	05/11/2002	10.46	Product Not Found	0	3.28
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	05/12/2002	10.41	Product Not Found	0	3.33
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO124-MW14	MW	10/14/2003	10.55	Undetermined	0.01	3.19
SWMU 62, New Housing Fuel Leak	DOWNTOWN	555	CTO-124-MW14	MW	9/15/2006	11.53	Product Not Found	0	2.21
SWMU 62, New Housing Fuel Leak			CTO-124-MW14		9/24/2007	11.02	Product Not Found	0	2.72
SWMU 62, New Housing Fuel Leak			CTO-124-MW14		9/23/2008	11.40	Product Not Found	0	2.34
SWMU 62, New Housing Fuel Leak			CTO-124-MW14		9/4/2009	11.17	DRO	0.01	2.57
SWMU 62, New Housing Fuel Leak			CTO-124-MW14		9/14/2010	11.37	Product Not Found	0	2.37
SWMU 62, New Housing Fuel Leak			CTO-124-MW14		9/13/2011	11.32	Product Not Found	0	2.42
SWMU 62, New Housing Fuel Leak			CTO-124-MW14		9/10/2012	11.03	Product Not Found	0	2.71
SWMU 62, New Housing Fuel Leak	DOWNTOWN	556	CTO124-MW15	MW	08/29/2001	17.78	Diesel	0.02	3.18
SWMU 62, New Housing Fuel Leak	DOWNTOWN	556	CTO124-MW15	MW	05/11/2002	17.42	Diesel	0.31	3.54
SWMU 62, New Housing Fuel Leak	DOWNTOWN	556	CTO124-MW15	MW	10/14/2003	17.46	Undetermined	0.01	3.50
SWMU 62, New Housing Fuel Leak	DOWNTOWN	556	CTO124-MW15	MW	9/15/2006	18.58	Product Not Found	0	2.38
SWMU 62, New Housing Fuel Leak			CTO-124-MW15		9/21/2007	17.77	Product Not Found	0	3.19
SWMU 62, New Housing Fuel Leak			CTO-124-MW15		9/23/2008	18.19	DRO	0.21	2.77

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak			CTO-124-MW15		9/9/2009	17.92	Product Not Found	0	3.04
SWMU 62, New Housing Fuel Leak			CTO-124-MW15		9/14/2010	18.18	GRO	0.34	2.78
SWMU 62, New Housing Fuel Leak			CTO-124-MW15		9/13/2011	18.06	GRO	0.1	2.90
SWMU 62, New Housing Fuel Leak			CTO-124-MW15		9/10/2012	17.82	Product Not Found	0	3.14
SWMU 62, New Housing Fuel Leak			CTO-124-MW15		9/7/2013	17.60	Product Not Found	0	3.36
SWMU 62, New Housing Fuel Leak	DOWNTOWN	648	DW-134-1	RW	08/29/2001	19.33	Diesel Sheen	0.01	8.12
SWMU 62, New Housing Fuel Leak	DOWNTOWN	649	DW-134-2	RW	08/29/2001	19.14	Diesel Sheen	0.01	8.10
SWMU 62, New Housing Fuel Leak	DOWNTOWN	760	HMW-102-1	MW	08/29/2001	18.71			6.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	760	HMW-102-1	MW	10/20/2003	19.74	Undetermined	0.02	5.55
SWMU 62, New Housing Fuel Leak	DOWNTOWN	760	HMW-102-1	MW	9/19/2006	20.26	Product Not Found	0	5.03
SWMU 62, New Housing Fuel Leak			HMW-102-1		9/19/2007	19.55	Product Not Found	0	5.74
SWMU 62, New Housing Fuel Leak			HMW-102-1		9/22/2008	22.08	Product Not Found	0	3.21
SWMU 62, New Housing Fuel Leak			HMW-102-1		9/4/2009	19.21	Product Not Found	0	6.08
SWMU 62, New Housing Fuel Leak			HMW-102-1		9/13/2010	19.81	Product Not Found	0	5.48
SWMU 62, New Housing Fuel Leak			HMW-102-1		9/12/2011	19.31	Product Not Found	0	5.98
SWMU 62, New Housing Fuel Leak			HMW-102-1		9/8/2012	19.38	Product Not Found	0	5.91
SWMU 62, New Housing Fuel Leak	102	202	HMW-102-11	MW	05/30/2001	16.33			8.34
SWMU 62, New Housing Fuel Leak	102	202	HMW-102-11	MW	06/30/2001	17.71	Product Not Found	0	6.96
SWMU 62, New Housing Fuel Leak	102	202	HMW-102-11	MW	07/31/2001	17.71	Product Not Found	0	6.96
SWMU 62, New Housing Fuel Leak	102	202	HMW-102-11	MW	08/31/2001	17.71	Product Not Found	0	6.96
SWMU 62, New Housing Fuel Leak	102	202	HMW-102-11	MW	09/01/2001	18.70			5.97
SWMU 62, New Housing Fuel Leak	102	202	HMW-102-11	MW	10/31/2001	17.71	Product Not Found	0	6.96
SWMU 62, New Housing Fuel Leak	102	202	HMW-102-11	MW	11/13/2001	17.97	Product Not Found	0	6.70
SWMU 62, New Housing Fuel Leak	102	202	HMW-102-11	MW	05/12/2002	17.67	Product Not Found	0	7.00
SWMU 62, New Housing Fuel Leak	DOWNTOWN	765	HMW-102-6	MW	08/30/2001	17.72			7.03
SWMU 62, New Housing Fuel Leak	DOWNTOWN	765	HMW-102-6	MW	09/27/2003	18.82	Product Not Found	0	5.93
SWMU 62, New Housing Fuel Leak	DOWNTOWN	765	HMW-102-6	MW	9/22/2006	19.23	Product Not Found	0	5.52
SWMU 62, New Housing Fuel Leak			HMW-102-6		9/18/2007	18.45	Product Not Found	0	6.30
SWMU 62, New Housing Fuel Leak			HMW-102-6		9/22/2008	18.75	Product Not Found	0	6.00
SWMU 62, New Housing Fuel Leak			HMW-102-6		9/4/2009	18.02	Product Not Found	0	6.73
SWMU 62, New Housing Fuel Leak			HMW-102-6		9/13/2010	18.69	Product Not Found	0	6.06
SWMU 62, New Housing Fuel Leak			HMW-102-6		9/12/2011	18.17	Product Not Found	0	6.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	766	HMW-102-7	MW	08/30/2001	17.60			7.19
SWMU 62, New Housing Fuel Leak	DOWNTOWN	767	HMW-102-8	MW	08/30/2001	18.12			7.34
SWMU 62, New Housing Fuel Leak	DOWNTOWN	767	HMW-102-8	MW	9/25/2006	19.71	Product Not Found	0	5.75
SWMU 62, New Housing Fuel Leak			HMW-102-8		9/24/2007	18.80	Product Not Found	0	6.66
SWMU 62, New Housing Fuel Leak	DOWNTOWN	768	HMW-102-9	MW	08/30/2001	17.87			7.32
SWMU 62, New Housing Fuel Leak	DOWNTOWN	840	HMW-107-1	MW	08/30/2001	17.02			7.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	841	HMW-107-2	MW	08/30/2001	16.93			7.77
SWMU 62, New Housing Fuel Leak			HMW-107-2		9/19/2007	17.75	Product Not Found	0	6.95
SWMU 62, New Housing Fuel Leak			HMW-107-2		9/22/2008	17.90	Product Not Found	0	6.80
SWMU 62, New Housing Fuel Leak			HMW-107-2		9/4/2009	17.10	GRO	0.01	7.60
SWMU 62, New Housing Fuel Leak			HMW-107-2		9/13/2010	17.83	Product Not Found	0	6.87
SWMU 62, New Housing Fuel Leak			HMW-107-2		9/12/2011	17.31	Product Not Found	0	7.39
SWMU 62, New Housing Fuel Leak	DOWNTOWN	630	HMW-134-1	MW	08/29/2001	18.03			7.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	631	HMW-134-2	MW	08/29/2001	17.77			7.87
SWMU 62, New Housing Fuel Leak	DOWNTOWN	652	HMW-139-2	MW	08/29/2001	17.48			7.77
SWMU 62, New Housing Fuel Leak	DOWNTOWN	652	HMW-139-2	MW	09/27/2003	19.81	Undetermined	1.33	5.44
SWMU 62, New Housing Fuel Leak	DOWNTOWN	652	HMW-139-2	MW	9/15/2006	18.94	Product Not Found	0	6.31
SWMU 62, New Housing Fuel Leak			HMW-139-2		9/15/2007	18.43	Product Not Found	0	6.82

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak			HMW-139-2		9/22/2008	18.28	Product Not Found	0	6.97
SWMU 62, New Housing Fuel Leak			HMW-139-2		9/4/2009	17.69	Product Not Found	0	7.56
SWMU 62, New Housing Fuel Leak			HMW-139-2		9/13/2010	18.42	Product Not Found	0	6.83
SWMU 62, New Housing Fuel Leak			HMW-139-2		9/12/2011	17.90	Product Not Found	0	7.35
SWMU 62, New Housing Fuel Leak	DOWNTOWN	653	HMW-139-3	MW	08/29/2001	18.53			7.80
SWMU 62, New Housing Fuel Leak	DOWNTOWN	653	HMW-139-3	MW	9/23/2006	20.01	Product Not Found	0	6.32
SWMU 62, New Housing Fuel Leak			HMW-139-3		9/19/2007	19.35	Product Not Found	0	6.98
SWMU 62, New Housing Fuel Leak			HMW-139-3		9/22/2008	19.33	Product Not Found	0	7.00
SWMU 62, New Housing Fuel Leak			HMW-139-3		9/4/2009	18.73	Product Not Found	0	7.60
SWMU 62, New Housing Fuel Leak			HMW-139-3		9/13/2010	19.45	Product Not Found	0	6.88
SWMU 62, New Housing Fuel Leak			HMW-139-3		9/12/2011	18.95	Product Not Found	0	7.38
SWMU 62, New Housing Fuel Leak	DOWNTOWN	654	HMW-139-4	MW	08/29/2001	15.93			7.77
SWMU 62, New Housing Fuel Leak	DOWNTOWN	855	HMW-146-1	MW	05/30/2001	14.17			9.35
SWMU 62, New Housing Fuel Leak	DOWNTOWN	855	HMW-146-1	MW	06/30/2001	15.82	Product Not Found	0	7.70
SWMU 62, New Housing Fuel Leak	DOWNTOWN	855	HMW-146-1	MW	07/31/2001	15.82	Diesel	0.01	7.70
SWMU 62, New Housing Fuel Leak	DOWNTOWN	855	HMW-146-1	MW	08/30/2001	16.09			7.43
SWMU 62, New Housing Fuel Leak	DOWNTOWN	855	HMW-146-1	MW	08/31/2001	15.82	Diesel	0.01	7.70
SWMU 62, New Housing Fuel Leak	DOWNTOWN	855	HMW-146-1	MW	09/01/2001	17.05			6.47
SWMU 62, New Housing Fuel Leak	DOWNTOWN	855	HMW-146-1	MW	10/31/2001	15.82	Diesel	0.01	7.70
SWMU 62, New Housing Fuel Leak	DOWNTOWN	855	HMW-146-1	MW	11/13/2001	16.66	Product Not Found	0	6.86
SWMU 62, New Housing Fuel Leak	DOWNTOWN	855	HMW-146-1	MW	05/12/2002	15.67	Product Not Found	0	7.85
SWMU 62, New Housing Fuel Leak	DOWNTOWN	855	HMW-146-1	MW	9/15/2006	17.57	Product Not Found	0	5.95
SWMU 62, New Housing Fuel Leak			HMW-146-1		9/24/2007	16.82	Product Not Found	0	6.70
SWMU 62, New Housing Fuel Leak			HMW-146-1		9/22/2008	17.05	Product Not Found	0	6.47
SWMU 62, New Housing Fuel Leak			HMW-146-1		9/4/2009	16.33	Product Not Found	0	7.19
SWMU 62, New Housing Fuel Leak			HMW-146-1		9/13/2010	17.02	Product Not Found	0	6.50
SWMU 62, New Housing Fuel Leak			HMW-146-1		9/12/2011	16.47	Product Not Found	0	7.05
SWMU 62, New Housing Fuel Leak			HMW-146-1		9/8/2012	16.64	Product Not Found	0	6.88
SWMU 62, New Housing Fuel Leak			HMW-146-1		9/10/2013	17.52	Product Not Found	0	6.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	857	HMW-146-3	MW	05/30/2001	15.08			8.33
SWMU 62, New Housing Fuel Leak	DOWNTOWN	857	HMW-146-3	MW	06/30/2001	16.76	Product Not Found	0	6.65
SWMU 62, New Housing Fuel Leak	DOWNTOWN	857	HMW-146-3	MW	07/31/2001	16.76	Product Not Found	0	6.65
SWMU 62, New Housing Fuel Leak	DOWNTOWN	857	HMW-146-3	MW	08/29/2001	15.66			7.75
SWMU 62, New Housing Fuel Leak	DOWNTOWN	857	HMW-146-3	MW	08/31/2001	16.76	Product Not Found	0	6.65
SWMU 62, New Housing Fuel Leak	DOWNTOWN	857	HMW-146-3	MW	09/01/2001	17.97			5.44
SWMU 62, New Housing Fuel Leak	DOWNTOWN	857	HMW-146-3	MW	10/31/2001	16.76	Product Not Found	0	6.65
SWMU 62, New Housing Fuel Leak	DOWNTOWN	857	HMW-146-3	MW	11/13/2001	17.48	Product Not Found	0	5.93
SWMU 62, New Housing Fuel Leak	DOWNTOWN	857	HMW-146-3	MW	05/12/2002	16.60	Product Not Found	0	6.81
SWMU 62, New Housing Fuel Leak	DOWNTOWN	857	HMW-146-3	MW	9/23/2006	17.23	Product Not Found	0	6.18
SWMU 62, New Housing Fuel Leak			HMW-146-3		9/15/2007	16.66	Product Not Found	0	6.75
SWMU 62, New Housing Fuel Leak			HMW-146-3		9/22/2008	16.60	Product Not Found	0	6.81
SWMU 62, New Housing Fuel Leak			HMW-146-3		9/4/2009	15.91	GRO	0.01	7.50
SWMU 62, New Housing Fuel Leak			HMW-146-3		9/13/2010	16.65	Product Not Found	0	6.76
SWMU 62, New Housing Fuel Leak			HMW-146-3		9/12/2011	16.09	Product Not Found	0	7.32
SWMU 62, New Housing Fuel Leak			HMW-146-3		9/8/2012	16.25	Product Not Found	0	7.16
SWMU 62, New Housing Fuel Leak			HMW-184-2		9/23/2006	NL		0	NM
SWMU 62, New Housing Fuel Leak	DOWNTOWN	571	HMW-303-1	MW	08/29/2001	26.97			3.81
SWMU 62, New Housing Fuel Leak	DOWNTOWN	571	HMW-303-1	MW	05/11/2002	26.34	Product Not Found	0	4.44
SWMU 62, New Housing Fuel Leak	DOWNTOWN	571	HMW-303-1	MW	10/14/2003	26.88	Undetermined	0.01	3.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	571	HMW-303-1	MW	9/15/2006	27.69	Product Not Found	0	3.09

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak			HMW-303-1		9/21/2007	27.05	Product Not Found	0	3.73
SWMU 62, New Housing Fuel Leak			HMW-303-1		9/23/2008	27.46	Product Not Found	0	3.32
SWMU 62, New Housing Fuel Leak			HMW-303-1		9/9/2009	27.17	DRO	0.01	3.61
SWMU 62, New Housing Fuel Leak			HMW-303-1		9/14/2010	27.45	Product Not Found	0	3.33
SWMU 62, New Housing Fuel Leak			HMW-303-1		9/13/2011	27.29	Product Not Found	0	3.49
SWMU 62, New Housing Fuel Leak			HMW-303-1		9/10/2012	27.11	Product Not Found	0	3.67
SWMU 62, New Housing Fuel Leak	DOWNTOWN	580	HMW-303-10	MW	08/29/2001	6.49			3.29
SWMU 62, New Housing Fuel Leak	DOWNTOWN	580	HMW-303-10	MW	05/11/2002	5.72	Product Not Found	0	4.06
SWMU 62, New Housing Fuel Leak	DOWNTOWN	580	HMW-303-10	MW	10/14/2003	6.19	Undetermined	0.01	3.59
SWMU 62, New Housing Fuel Leak	DOWNTOWN	580	HMW-303-10	MW	9/15/2006	7.10	Product Not Found	0	2.68
SWMU 62, New Housing Fuel Leak			HMW-303-10		9/21/2007	6.35	Product Not Found	0	3.43
SWMU 62, New Housing Fuel Leak			HMW-303-10		9/23/2008	6.90	Product Not Found	0	2.88
SWMU 62, New Housing Fuel Leak			HMW-303-10		9/9/2009	6.66	DRO	0.01	3.12
SWMU 62, New Housing Fuel Leak			HMW-303-10		9/14/2010	6.88	Product Not Found	0	2.90
SWMU 62, New Housing Fuel Leak			HMW-303-10		9/13/2011	6.63	Product Not Found	0	3.15
SWMU 62, New Housing Fuel Leak			HMW-303-10		9/10/2012	6.49	Product Not Found	0	3.29
SWMU 62, New Housing Fuel Leak	DOWNTOWN	581	HMW-303-11	MW	08/29/2001	26.78	Diesel	0.28	3.57
SWMU 62, New Housing Fuel Leak	DOWNTOWN	581	HMW-303-11	MW	05/11/2002	25.86	Diesel Sheen	0.01	4.49
SWMU 62, New Housing Fuel Leak	DOWNTOWN	581	HMW-303-11	MW	10/14/2003	26.43	Product Not Found	0	3.92
SWMU 62, New Housing Fuel Leak	DOWNTOWN	581	HMW-303-11	MW	9/15/2006	28.37		1.35	1.98
SWMU 62, New Housing Fuel Leak			HMW-303-11		9/24/2007	26.86	Product Not Found	0	3.49
SWMU 62, New Housing Fuel Leak			HMW-303-11		9/23/2008	27.05	Product Not Found	0	3.30
SWMU 62, New Housing Fuel Leak			HMW-303-11		9/9/2009	26.76	Product Not Found	0	3.59
SWMU 62, New Housing Fuel Leak			HMW-303-11		9/14/2010	27.01	Product Not Found	0	3.34
SWMU 62, New Housing Fuel Leak			HMW-303-11		9/13/2011	26.85	Product Not Found	0	3.50
SWMU 62, New Housing Fuel Leak			HMW-303-11		9/7/2013	26.60	Product Not Found	0	3.75
SWMU 62, New Housing Fuel Leak			HMW-303-11		9/10/2012	26.70	Product Not Found	0	3.65
SWMU 62, New Housing Fuel Leak	DOWNTOWN	582	HMW-303-12	MW	08/29/2001	24.50			5.09
SWMU 62, New Housing Fuel Leak	DOWNTOWN	582	HMW-303-12	MW	10/14/2003	25.07	Product Not Found	0	4.52
SWMU 62, New Housing Fuel Leak	DOWNTOWN	582	HMW-303-12	MW	9/27/2006	24.79		0.31	4.80
SWMU 62, New Housing Fuel Leak			HMW-303-12		9/24/2007	25.00	DRO	0.01	4.59
SWMU 62, New Housing Fuel Leak			HMW-303-12		9/23/2008	25.38	Product Not Found	0	4.21
SWMU 62, New Housing Fuel Leak			HMW-303-12		9/9/2009	25.00	DRO	0.01	4.59
SWMU 62, New Housing Fuel Leak			HMW-303-12		9/14/2010	25.38	Product Not Found	0	4.21
SWMU 62, New Housing Fuel Leak			HMW-303-12		9/13/2011	25.09	Product Not Found	0	4.50
SWMU 62, New Housing Fuel Leak	DOWNTOWN	572	HMW-303-2	MW	08/29/2001	26.82	Diesel Sheen	0.01	3.73
SWMU 62, New Housing Fuel Leak	DOWNTOWN	572	HMW-303-2	MW	05/11/2002	26.18	Product Not Found	0	4.37
SWMU 62, New Housing Fuel Leak	DOWNTOWN	572	HMW-303-2	MW	10/14/2003	26.70	Product Not Found	0	3.85
SWMU 62, New Housing Fuel Leak	DOWNTOWN	572	HMW-303-2	MW	9/15/2006	27.54	Product Not Found	0	3.01
SWMU 62, New Housing Fuel Leak			HMW-303-2		9/21/2007	26.85	Product Not Found	0	3.70
SWMU 62, New Housing Fuel Leak			HMW-303-2		9/23/2008		Product Not Found	0	3.26
SWMU 62, New Housing Fuel Leak			HMW-303-2		9/9/2009	27.02	DRO	0.01	3.53
SWMU 62, New Housing Fuel Leak			HMW-303-2		9/14/2010	27.29	DRO	0.01	3.26
SWMU 62, New Housing Fuel Leak			HMW-303-2		9/13/2011	27.14	Product Not Found	0	3.41
SWMU 62, New Housing Fuel Leak			HMW-303-2		9/10/2012	26.93	Product Not Found	0	3.62
SWMU 62, New Housing Fuel Leak	DOWNTOWN	573	HMW-303-3	MW	08/29/2001	28.34	Diesel	0.75	3.30
SWMU 62, New Housing Fuel Leak	DOWNTOWN	573	HMW-303-3	MW	05/11/2002	27.05	Diesel	0.05	4.59
SWMU 62, New Housing Fuel Leak	DOWNTOWN	573	HMW-303-3	MW	10/14/2003	27.69	Product Not Found	0	3.95
SWMU 62, New Housing Fuel Leak	DOWNTOWN	573	HMW-303-3	MW	9/14/2006	29.18		0.76	2.46
SWMU 62, New Housing Fuel Leak			HMW-303-3		9/21/2007	27.72	DRO	0.19	3.92

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak			HMW-303-3		9/23/2008	28.19	DRO	0.36	3.45
SWMU 62, New Housing Fuel Leak			HMW-303-3		9/9/2009	27.94	Product Not Found	0	3.70
SWMU 62, New Housing Fuel Leak			HMW-303-3		9/14/2010	28.24	Product Not Found	0	3.40
SWMU 62, New Housing Fuel Leak			HMW-303-3		9/13/2011	28.32	DRO	0.07	3.32
SWMU 62, New Housing Fuel Leak			HMW-303-3		9/10/2012	27.85	Product Not Found	0	3.79
SWMU 62, New Housing Fuel Leak			HMW-303-3		9/7/2013	27.82	Product Not Found	0	3.82
SWMU 62, New Housing Fuel Leak	DOWNTOWN	574	HMW-303-4	MW	08/29/2001	25.96			4.24
SWMU 62, New Housing Fuel Leak	DOWNTOWN	574	HMW-303-4	MW	05/11/2002	25.23	Product Not Found	0	4.97
SWMU 62, New Housing Fuel Leak	DOWNTOWN	574	HMW-303-4	MW	10/14/2003	26.09	Undetermined	0.04	4.11
SWMU 62, New Housing Fuel Leak	DOWNTOWN	574	HMW-303-4	MW	9/15/2006	26.84	Product Not Found	0	3.36
SWMU 62, New Housing Fuel Leak			HMW-303-4		9/21/2007	26.05	DRO	0.02	4.15
SWMU 62, New Housing Fuel Leak			HMW-303-4		9/23/2008	26.49	Product Not Found	0	3.71
SWMU 62, New Housing Fuel Leak			HMW-303-4		9/9/2009	26.21	Product Not Found	0	3.99
SWMU 62, New Housing Fuel Leak			HMW-303-4		9/14/2010	26.53	Product Not Found	0	3.67
SWMU 62, New Housing Fuel Leak			HMW-303-4		9/13/2011	26.32	Product Not Found	0	3.88
SWMU 62, New Housing Fuel Leak			HMW-303-4		9/10/2012	26.16	Product Not Found	0	4.04
SWMU 62, New Housing Fuel Leak			HMW-303-4		9/7/2013	26.17	Product Not Found	0	4.03
SWMU 62, New Housing Fuel Leak	DOWNTOWN	575	HMW-303-5	MW	08/29/2001	27.37	Diesel	0.37	3.82
SWMU 62, New Housing Fuel Leak	DOWNTOWN	575	HMW-303-5	MW	05/11/2002	26.66	Diesel	0.35	4.53
SWMU 62, New Housing Fuel Leak	DOWNTOWN	575	HMW-303-5	MW	10/14/2003	27.08	Undetermined	0.01	4.11
SWMU 62, New Housing Fuel Leak	DOWNTOWN	575	HMW-303-5	MW	9/15/2006	27.83	Product Not Found	0	3.36
SWMU 62, New Housing Fuel Leak			HMW-303-5		9/24/2007	27.20	Product Not Found	0	3.99
SWMU 62, New Housing Fuel Leak			HMW-303-5		9/23/2008	27.61	DRO	0.09	3.58
SWMU 62, New Housing Fuel Leak			HMW-303-5		9/9/2009	27.29	Product Not Found	0	3.90
SWMU 62, New Housing Fuel Leak			HMW-303-5		9/14/2010	27.59	Product Not Found	0	3.60
SWMU 62, New Housing Fuel Leak			HMW-303-5		9/13/2011	27.38	Product Not Found	0	3.81
SWMU 62, New Housing Fuel Leak	DOWNTOWN	576	HMW-303-6	MW	08/29/2001	28.03			4.51
SWMU 62, New Housing Fuel Leak	DOWNTOWN	576	HMW-303-6	MW	05/11/2002	27.28	Product Not Found	0	5.26
SWMU 62, New Housing Fuel Leak	DOWNTOWN	576	HMW-303-6	MW	10/14/2003	28.21	Product Not Found	0	4.33
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	05/30/2001	27.34			6.53
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	06/30/2001	28.75	Product Not Found	0	5.12
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	07/31/2001	28.75	Product Not Found	0	5.12
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	08/29/2001	29.41			4.46
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	08/31/2001	28.75	Product Not Found	0	5.12
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	09/01/2001	29.48			4.39
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	10/31/2001	28.75	Product Not Found	0	5.12
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	11/13/2001	28.62	Product Not Found	0	5.25
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	05/11/2002	28.69	Product Not Found	0	5.18
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	05/12/2002	28.73	Product Not Found	0	5.14
SWMU 62, New Housing Fuel Leak	DOWNTOWN	577	HMW-303-7	MW	10/14/2003	29.62	Product Not Found	0	4.25
SWMU 62, New Housing Fuel Leak	DOWNTOWN	578	HMW-303-8	MW	08/29/2001	21.77			5.15
SWMU 62, New Housing Fuel Leak	DOWNTOWN	578	HMW-303-8	MW	05/11/2002	20.92	Product Not Found	0	6.00
SWMU 62, New Housing Fuel Leak	DOWNTOWN	578	HMW-303-8	MW	10/14/2003	22.24	Product Not Found	0	4.68
SWMU 62, New Housing Fuel Leak	DOWNTOWN	579	HMW-303-9	MW	08/29/2001	26.57	Diesel	0.29	2.97
SWMU 62, New Housing Fuel Leak	DOWNTOWN	579	HMW-303-9	MW	05/11/2002	25.76	Diesel	0.08	3.78
SWMU 62, New Housing Fuel Leak	DOWNTOWN	579	HMW-303-9	MW	10/14/2003	29.98	Product Not Found	0	-0.44
SWMU 62, New Housing Fuel Leak	DOWNTOWN	579	HMW-303-9	MW	9/15/2006	26.90	Product Not Found	0	2.64
SWMU 62, New Housing Fuel Leak			HMW-303-9		9/21/2007	26.29	Product Not Found	TRACE	3.25
SWMU 62, New Housing Fuel Leak			HMW-303-9		9/23/2008	26.72	Product Not Found	0	2.82
SWMU 62, New Housing Fuel Leak			HMW-303-9		9/9/2009	26.45	Product Not Found	0	3.09

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak			HMW-303-9		9/14/2010	26.69	DRO	0.01	2.85
SWMU 62, New Housing Fuel Leak			HMW-303-9		9/13/2011	26.58	Product Not Found	0	2.96
SWMU 62, New Housing Fuel Leak			HMW-303-9		9/10/2012	26.35	Product Not Found	0	3.19
SWMU 62, New Housing Fuel Leak	DOWNTOWN	750	MRP-MW1	MW	08/29/2001	19.14			6.75
SWMU 62, New Housing Fuel Leak	DOWNTOWN	753	MRP-MW15	MW	10/12/2003	24.37	Product Not Found	0	5.69
SWMU 62, New Housing Fuel Leak	DOWNTOWN	753	MRP-MW15	MW	09/21/2004	24.14	Product Not Found	0	5.92
SWMU 62, New Housing Fuel Leak	DOWNTOWN	751	MRP-MW2	MW	08/29/2001	20.71			6.28
SWMU 62, New Housing Fuel Leak	DOWNTOWN	751	MRP-MW2	MW	9/22/2006	21.66	Product Not Found	0	5.33
SWMU 62, New Housing Fuel Leak			MRP-MW2		9/17/2007	21.57	Product Not Found	0	5.42
SWMU 62, New Housing Fuel Leak			MRP-MW2		9/22/2008	Dry	Dry	0	Dry
SWMU 62, New Housing Fuel Leak			MRP-MW2		9/4/2009	21.08	Product Not Found	0	5.91
SWMU 62, New Housing Fuel Leak			MRP-MW2		9/13/2010	19.83	Product Not Found	0	7.16
SWMU 62, New Housing Fuel Leak			MRP-MW2		9/12/2011	21.14	Product Not Found	0	5.85
SWMU 62, New Housing Fuel Leak			MRP-MW2		9/8/2012	21.38	Product Not Found	0	5.61
SWMU 62, New Housing Fuel Leak			MRP-MW2		8/1/2013	21.69	Product Not Found	0	5.30
SWMU 62, New Housing Fuel Leak	DOWNTOWN	752	MRP-MW3	MW	05/30/2001	5.50			21.75
SWMU 62, New Housing Fuel Leak	DOWNTOWN	752	MRP-MW3	MW	06/30/2001	6.02	Product Not Found	0	21.23
SWMU 62, New Housing Fuel Leak	DOWNTOWN	752	MRP-MW3	MW	07/31/2001	6.02	Product Not Found	0	21.23
SWMU 62, New Housing Fuel Leak	DOWNTOWN	752	MRP-MW3	MW	08/29/2001	7.53			19.72
SWMU 62, New Housing Fuel Leak	DOWNTOWN	752	MRP-MW3	MW	08/31/2001	6.02	Product Not Found	0	21.23
SWMU 62, New Housing Fuel Leak	DOWNTOWN	752	MRP-MW3	MW	09/01/2001	7.64			19.61
SWMU 62, New Housing Fuel Leak	DOWNTOWN	752	MRP-MW3	MW	10/31/2001	6.02	Product Not Found	0	21.23
SWMU 62, New Housing Fuel Leak	DOWNTOWN	752	MRP-MW3	MW	11/13/2001	3.69	Product Not Found	0	23.56
SWMU 62, New Housing Fuel Leak	DOWNTOWN	752	MRP-MW3	MW	05/12/2002	5.58	Product Not Found	0	21.67
SWMU 62, New Housing Fuel Leak	DOWNTOWN	752	MRP-MW3	MW	9/22/2006	8.35	Product Not Found	0	18.90
SWMU 62, New Housing Fuel Leak			MRP-MW3		9/17/2007	7.38	Product Not Found	0	19.87
SWMU 62, New Housing Fuel Leak			MRP-MW3		9/22/2008	8.68	GRO	0.06	18.57
SWMU 62, New Housing Fuel Leak			MRP-MW3		9/4/2009	7.75	Product Not Found	0	19.50
SWMU 62, New Housing Fuel Leak			MRP-MW3		9/13/2010	8.88	GRO	0.05	18.37
SWMU 62, New Housing Fuel Leak			MRP-MW3		9/12/2011	3.73	Product Not Found	0	23.52
SWMU 62, New Housing Fuel Leak			MRP-MW3		9/8/2012	7.67	Product Not Found	0	19.58
SWMU 62, New Housing Fuel Leak			MRP-MW3		9/10/2013	8.29	Product Not Found	0	18.96
SWMU 62, New Housing Fuel Leak	DOWNTOWN	550	MRP-MW4	MW	08/29/2001	4.89			28.01
SWMU 62, New Housing Fuel Leak	DOWNTOWN	757	MW-102-4	MW	08/30/2001	19.00	Diesel	0.01	7.48
SWMU 62, New Housing Fuel Leak	DOWNTOWN	757	MW-102-4	MW	9/15/2006	2.34	Product Not Found	0	24.14
SWMU 62, New Housing Fuel Leak			MW-102-4		9/24/2007	2.26	Product Not Found	0	24.22
SWMU 62, New Housing Fuel Leak			MW-102-4		9/26/2008	2.21	Product Not Found	0	24.27
SWMU 62, New Housing Fuel Leak			MW-102-4		9/4/2009	2.21	Product Not Found	0	24.27
SWMU 62, New Housing Fuel Leak			MW-102-6		9/15/2006	NL			NM
SWMU 62, New Housing Fuel Leak			MW-107-1		9/25/2006	19.98	Product Not Found	0	6.29
SWMU 62, New Housing Fuel Leak			MW-107-1		9/21/2007	19.04	Product Not Found	0	7.23
SWMU 62, New Housing Fuel Leak			MW-107-1		9/22/2008	18.60	Product Not Found	0	7.05
SWMU 62, New Housing Fuel Leak			MW-107-1		9/4/2009	17.87	Product Not Found	0	7.78
SWMU 62, New Housing Fuel Leak			MW-107-1		9/13/2010	18.58	Product Not Found	0	7.07
SWMU 62, New Housing Fuel Leak			MW-107-1		9/12/2011	18.04	Product Not Found	0	7.61
SWMU 62, New Housing Fuel Leak			MW-107-1		9/8/2012	18.22	Product Not Found	0	7.43
SWMU 62, New Housing Fuel Leak			MW-107-1		9/8/2012	18.60	Product Not Found	0	7.05
SWMU 62, New Housing Fuel Leak	DOWNTOWN	846	MW-107-10	MW	05/30/2001	15.33			10.70
SWMU 62, New Housing Fuel Leak	DOWNTOWN	846	MW-107-10	MW	06/30/2001	17.02	Product Not Found	0	9.01
SWMU 62, New Housing Fuel Leak	DOWNTOWN	846	MW-107-10	MW	07/31/2001	17.02	Product Not Found	0	9.01

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak	DOWNTOWN	846	MW-107-10	MW	08/30/2001	18.16			7.87
SWMU 62, New Housing Fuel Leak	DOWNTOWN	846	MW-107-10	MW	08/31/2001	17.02	Product Not Found	0	9.01
SWMU 62, New Housing Fuel Leak	DOWNTOWN	846	MW-107-10	MW	09/01/2001	18.21			7.82
SWMU 62, New Housing Fuel Leak	DOWNTOWN	846	MW-107-10	MW	10/31/2001	17.02	Product Not Found	0	9.01
SWMU 62, New Housing Fuel Leak	DOWNTOWN	846	MW-107-10	MW	11/13/2001	12.82	Product Not Found	0	13.21
SWMU 62, New Housing Fuel Leak	DOWNTOWN	846	MW-107-10	MW	05/12/2002	16.88	Product Not Found	0	9.15
SWMU 62, New Housing Fuel Leak	DOWNTOWN	847	MW-107-11	MW	08/30/2001	17.49	Diesel	0.03	7.91
SWMU 62, New Housing Fuel Leak	DOWNTOWN	847	MW-107-11	MW	09/27/2003	18.54	Product Not Found	0	6.86
SWMU 62, New Housing Fuel Leak	DOWNTOWN	847	MW-107-11	MW	9/15/2006	18.92	Product Not Found	0	6.48
SWMU 62, New Housing Fuel Leak			MW-107-11		9/24/2007	18.16	Product Not Found	0	7.24
SWMU 62, New Housing Fuel Leak			MW-107-11		9/22/2008	18.41	Product Not Found	0	6.99
SWMU 62, New Housing Fuel Leak			MW-107-11		9/4/2009	17.68	Product Not Found	0	7.72
SWMU 62, New Housing Fuel Leak			MW-107-11		9/13/2010	18.40	Product Not Found	0	7.00
SWMU 62, New Housing Fuel Leak			MW-107-11		9/12/2011	17.85	Product Not Found	0	7.55
SWMU 62, New Housing Fuel Leak			MW-107-4		9/23/2006	NL		0	NM
SWMU 62, New Housing Fuel Leak	DOWNTOWN	645	MW-134-10	MW	08/29/2001	16.83			7.99
SWMU 62, New Housing Fuel Leak	DOWNTOWN	645	MW-134-10	MW	05/10/2003	16.02	Product Not Found	0	8.80
SWMU 62, New Housing Fuel Leak	DOWNTOWN	645	MW-134-10	MW	09/27/2003	18.11	Undetermined	0.08	6.71
SWMU 62, New Housing Fuel Leak	DOWNTOWN	645	MW-134-10	MW	9/15/2006	18.28	Product Not Found	0	6.54
SWMU 62, New Housing Fuel Leak			MW-134-10		9/24/2007	17.45	Product Not Found	0	7.37
SWMU 62, New Housing Fuel Leak			MW-134-10		9/22/2008	17.61	Product Not Found	0	7.21
SWMU 62, New Housing Fuel Leak			MW-134-10		9/4/2009	17.03	Product Not Found	0	7.79
SWMU 62, New Housing Fuel Leak			MW-134-10		9/13/2010	17.77	Product Not Found	0	7.05
SWMU 62, New Housing Fuel Leak			MW-134-10		9/12/2011	17.23	Product Not Found	0	7.59
SWMU 62, New Housing Fuel Leak			MW-134-10		9/8/2012	17.31	Product Not Found	0	7.51
SWMU 62, New Housing Fuel Leak			MW-134-10		9/10/2013	17.18	Product Not Found	0	7.10
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	05/30/2001	14.74			11.79
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	06/30/2001	16.38	Product Not Found	0	10.15
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	07/31/2001	16.38	Product Not Found	0	10.15
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	08/29/2001	17.59			8.94
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	08/31/2001	16.38	Product Not Found	0	10.15
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	09/01/2001	17.75			8.78
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	10/31/2001	16.38	Product Not Found	0	10.15
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	11/13/2001	17.12	Product Not Found	0	9.41
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	05/12/2002	16.24	Product Not Found	0	10.29
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	05/10/2003	16.80	Product Not Found	0	9.73
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	9/22/2005	18.22		0	8.31
SWMU 62, New Housing Fuel Leak	DOWNTOWN	646	MW-134-11	MW	9/23/2006	19.13		0	7.40
SWMU 62, New Housing Fuel Leak			MW-134-11		9/20/2007	18.39	Product Not Found	0	8.14
SWMU 62, New Housing Fuel Leak			MW-134-11		9/22/2008	18.35	Product Not Found	0	8.18
SWMU 62, New Housing Fuel Leak			MW-134-11		9/4/2009	17.82	Product Not Found	0	8.71
SWMU 62, New Housing Fuel Leak			MW-134-11		9/13/2010	18.54	Product Not Found	0	7.99
SWMU 62, New Housing Fuel Leak			MW-134-11		9/12/2011	18.01	Product Not Found	0	8.52
SWMU 62, New Housing Fuel Leak			MW-134-11		9/8/2012	18.01	Product Not Found	0	8.52
SWMU 62, New Housing Fuel Leak			MW-134-11		9/10/2013	18.49	Product Not Found	0	8.04
SWMU 62, New Housing Fuel Leak	DOWNTOWN	636	MW-134-2	MW	08/29/2001	18.62			8.18
SWMU 62, New Housing Fuel Leak	DOWNTOWN	636	MW-134-2	MW	05/10/2003	16.95	Product Not Found	0	9.85
SWMU 62, New Housing Fuel Leak	DOWNTOWN	636	MW-134-2	MW	10/20/2003				
SWMU 62, New Housing Fuel Leak	DOWNTOWN	637	MW-134-2A	MW	08/29/2001	19.05			7.75
SWMU 62, New Housing Fuel Leak	DOWNTOWN	638	MW-134-3	MW	08/29/2001	17.96	Diesel Sheen	0.01	8.05

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak	DOWNTOWN	638	MW-134-3	MW	9/23/2006	NL	Product Not Found	0	NM
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	05/30/2001	16.17			10.37
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	06/30/2001	17.78	Product Not Found	0	8.76
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	07/31/2001	17.78	Product Not Found	0	8.76
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	08/29/2001	18.46			8.08
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	08/31/2001	17.78	Product Not Found	0	8.76
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	09/01/2001	19.11			7.43
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	10/31/2001	17.78	Product Not Found	0	8.76
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	11/13/2001	18.54	Product Not Found	0	8.00
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	05/12/2002	17.71	Product Not Found	0	8.83
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	05/10/2003	18.23	Product Not Found	0	8.31
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	10/20/2003	20.46	Undetermined	0.01	6.08
SWMU 62, New Housing Fuel Leak	DOWNTOWN	643	MW-134-8	MW	9/15/2006	NL	Product Not Found	0	NM
SWMU 62, New Housing Fuel Leak	DOWNTOWN	656	MW-139-2	MW	08/29/2001	12.37			14.35
SWMU 62, New Housing Fuel Leak	DOWNTOWN	656	MW-139-2	MW	9/25/2006	12.30	Product Not Found	0	14.42
SWMU 62, New Housing Fuel Leak	DOWNTOWN	656	MW-139-2	MW	9/24/2007	12.26	Product Not Found	0	14.46
SWMU 62, New Housing Fuel Leak	DOWNTOWN	858	MW-146-1	MW	08/30/2001	16.98			7.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	858	MW-146-1	MW	09/27/2003	17.24	Product Not Found	0	7.64
SWMU 62, New Housing Fuel Leak	DOWNTOWN	858	MW-146-1	MW	9/24/2007	17.71	Product Not Found	0	17.71
SWMU 62, New Housing Fuel Leak	DOWNTOWN	858	MW-146-1	MW	9/22/2008	17.50	Product Not Found	0	6.92
SWMU 62, New Housing Fuel Leak	DOWNTOWN	858	MW-146-1	MW	9/4/2009	16.77	Product Not Found	0	7.65
SWMU 62, New Housing Fuel Leak	DOWNTOWN	858	MW-146-1	MW	9/13/2010	17.50	Product Not Found	0	6.92
SWMU 62, New Housing Fuel Leak	DOWNTOWN	858	MW-146-1	MW	9/12/2011	16.95	Product Not Found	0	7.47
SWMU 62, New Housing Fuel Leak	DOWNTOWN	858	MW-146-1	MW	9/8/2012	17.12	Product Not Found	0	7.30
SWMU 62, New Housing Fuel Leak	DOWNTOWN	858	MW-146-1	MW	9/10/2013	17.52	Product Not Found	0	6.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	865	MW-146-11	MW	05/30/2001	11.67			11.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	865	MW-146-11	MW	06/30/2001	13.35	Product Not Found	0	9.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	865	MW-146-11	MW	07/31/2001	13.35	Product Not Found	0	9.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	865	MW-146-11	MW	08/29/2001	13.96			9.29
SWMU 62, New Housing Fuel Leak	DOWNTOWN	865	MW-146-11	MW	08/31/2001	13.35	Product Not Found	0	9.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	865	MW-146-11	MW	09/01/2001	14.08			9.17
SWMU 62, New Housing Fuel Leak	DOWNTOWN	865	MW-146-11	MW	10/31/2001	13.35	Product Not Found	0	9.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	865	MW-146-11	MW	11/13/2001	13.46	Product Not Found	0	9.79
SWMU 62, New Housing Fuel Leak	DOWNTOWN	865	MW-146-11	MW	05/12/2002	13.41	Product Not Found	0	9.84
SWMU 62, New Housing Fuel Leak	DOWNTOWN	866	MW-146-12	MW	05/30/2001	15.17			10.98
SWMU 62, New Housing Fuel Leak	DOWNTOWN	866	MW-146-12	MW	06/30/2001	16.83	Product Not Found	0	9.32
SWMU 62, New Housing Fuel Leak	DOWNTOWN	866	MW-146-12	MW	07/31/2001	16.83	Product Not Found	0	9.32
SWMU 62, New Housing Fuel Leak	DOWNTOWN	866	MW-146-12	MW	08/31/2001	16.83	Product Not Found	0	9.32
SWMU 62, New Housing Fuel Leak	DOWNTOWN	866	MW-146-12	MW	09/01/2001	18.08			8.07
SWMU 62, New Housing Fuel Leak	DOWNTOWN	866	MW-146-12	MW	10/31/2001	16.83	Product Not Found	0	9.32
SWMU 62, New Housing Fuel Leak	DOWNTOWN	866	MW-146-12	MW	11/13/2001	17.57	Product Not Found	0	8.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	866	MW-146-12	MW	05/12/2002	16.66	Product Not Found	0	9.49
SWMU 62, New Housing Fuel Leak	DOWNTOWN	872	MW-146-3	AW	08/30/2001	17.95			7.40
SWMU 62, New Housing Fuel Leak	DOWNTOWN	860	MW-146-4	MW	08/30/2001	16.83			7.52
SWMU 62, New Housing Fuel Leak			MW-146-6		NS	NA	Product Not Found	0	24.34
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	05/30/2001	12.59			14.87
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	06/30/2001	14.37	Product Not Found	0	13.09
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	07/31/2001	14.37	Product Not Found	0	13.09
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	08/31/2001	14.37	Product Not Found	0	13.09
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	09/01/2001	14.65			12.81

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	10/31/2001	14.37	Product Not Found	0	13.09
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	11/13/2001	14.29	Product Not Found	0	13.17
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	05/12/2002	17.94	Product Not Found	0	9.52
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	9/25/2006	21.03	Product Not Found	0	6.43
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	9/19/2007	20.30	Product Not Found	0	7.16
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	9/22/2008	19.31	Product Not Found	0	7.55
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	9/4/2009	18.75	Product Not Found	0	8.11
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	9/13/2010	19.53	Product Not Found	0	7.33
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	9/12/2011	19.05	Product Not Found	0	7.81
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	9/8/2012	19.05	Product Not Found	0	7.81
SWMU 62, New Housing Fuel Leak	DOWNTOWN	681	MW-187-1	MW	9/10/2013	19.42	Product Not Found	0	7.44
SWMU 62, New Housing Fuel Leak			MW-187-3		9/15/2006	NL		0	NM
SWMU 62, New Housing Fuel Leak	DOWNTOWN	530	MW-303-1	MW	08/29/2001	24.59	Diesel	0.01	4.99
SWMU 62, New Housing Fuel Leak	DOWNTOWN	530	MW-303-1	MW	05/11/2002	23.76	Product Not Found	0	5.82
SWMU 62, New Housing Fuel Leak	DOWNTOWN	530	MW-303-1	MW	10/14/2003	25.33	Undetermined	0.41	4.25
SWMU 62, New Housing Fuel Leak	DOWNTOWN	530	MW-303-1	MW	9/14/2006	25.63	Product Not Found	0	3.95
SWMU 62, New Housing Fuel Leak			MW-303-1		9/24/2007	24.77	DRO	0.01	4.81
SWMU 62, New Housing Fuel Leak			MW-303-1		9/23/2008	24.99	Product Not Found	0	4.32
SWMU 62, New Housing Fuel Leak			MW-303-1		9/9/2009	24.63	Product Not Found	0	4.68
SWMU 62, New Housing Fuel Leak			MW-303-1		9/14/2010	25.00	Product Not Found	0	4.31
SWMU 62, New Housing Fuel Leak			MW-303-1		9/13/2011	24.74	Product Not Found	0	4.57
SWMU 62, New Housing Fuel Leak	DOWNTOWN	537	MW-303-10	MW	08/29/2001	23.51	Diesel	0.07	4.75
SWMU 62, New Housing Fuel Leak	DOWNTOWN	537	MW-303-10	MW	05/11/2002	22.68	Product Not Found	0	5.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	537	MW-303-10	MW	10/14/2003	24.06	Undetermined	0.34	4.20
SWMU 62, New Housing Fuel Leak	DOWNTOWN	537	MW-303-10	MW	9/14/2006	24.48	Product Not Found	0	3.78
SWMU 62, New Housing Fuel Leak			MW-303-10		9/24/2007	23.66	DRO	0.01	4.60
SWMU 62, New Housing Fuel Leak			MW-303-10		9/23/2008	23.53	DRO	0.01	4.14
SWMU 62, New Housing Fuel Leak			MW-303-10		9/9/2009	23.19	Product Not Found	0	4.49
SWMU 62, New Housing Fuel Leak			MW-303-10		9/14/2010	23.55	DRO	0.02	4.12
SWMU 62, New Housing Fuel Leak			MW-303-10		9/13/2011	23.29	Product Not Found	0	4.39
SWMU 62, New Housing Fuel Leak	DOWNTOWN	539	MW-303-12	MW	08/29/2001	22.27	Diesel	0.35	4.36
SWMU 62, New Housing Fuel Leak	DOWNTOWN	539	MW-303-12	MW	05/11/2002	23.71	Product Not Found	0	2.92
SWMU 62, New Housing Fuel Leak	DOWNTOWN	539	MW-303-12	MW	05/11/2002	21.21	Product Not Found	0	5.42
SWMU 62, New Housing Fuel Leak	DOWNTOWN	539	MW-303-12	MW	10/15/2003	22.43	Unknown Odor	0.18	4.20
SWMU 62, New Housing Fuel Leak	DOWNTOWN	539	MW-303-12	MW	9/14/2006	22.96	Product Not Found	0	3.67
SWMU 62, New Housing Fuel Leak			MW-303-12		9/26/2007	22.04	Product Not Found	0	4.59
SWMU 62, New Housing Fuel Leak			MW-303-12		9/23/2008	21.77	Product Not Found	0	4.03
SWMU 62, New Housing Fuel Leak			MW-303-12		9/9/2009	21.48	Product Not Found	0	4.32
SWMU 62, New Housing Fuel Leak			MW-303-12		9/14/2010	22.83	DRO	0.04	2.97
SWMU 62, New Housing Fuel Leak			MW-303-12		9/12/2011	21.58	Product Not Found	0	4.22
SWMU 62, New Housing Fuel Leak			MW-303-12		9/7/2013	21.54	Product Not Found	0	4.26
SWMU 62, New Housing Fuel Leak			MW-303-12		9/10/2012	21.45	Product Not Found	0	4.35
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	05/30/2001	21.92			6.89
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	06/30/2001	23.47	Product Not Found	0	5.34
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	07/31/2001	23.47	Product Not Found	0	5.34
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	08/29/2001	24.18			4.63
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	08/31/2001	23.47	Product Not Found	0	5.34
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	09/01/2001	24.23			4.58
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	10/31/2001	23.47	Product Not Found	0	5.34
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	11/13/2001	23.42	Product Not Found	0	5.39

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	05/11/2002	23.37	Product Not Found	0	5.44
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	05/12/2002	23.43	Product Not Found	0	5.38
SWMU 62, New Housing Fuel Leak	DOWNTOWN	540	MW-303-13	MW	10/15/2003	24.54	Product Not Found	0	4.27
SWMU 62, New Housing Fuel Leak	DOWNTOWN	541	MW-303-14	MW	08/29/2001	22.22			5.96
SWMU 62, New Housing Fuel Leak	DOWNTOWN	541	MW-303-14	MW	9/25/2006	23.39	Product Not Found	0	4.79
SWMU 62, New Housing Fuel Leak			MW-303-14		9/24/2007	22.44	DRO	0.01	5.74
SWMU 62, New Housing Fuel Leak			MW-303-14		9/23/2008	22.81	Product Not Found	0	5.29
SWMU 62, New Housing Fuel Leak			MW-303-14		9/9/2009	22.44	Product Not Found	0	5.66
SWMU 62, New Housing Fuel Leak			MW-303-14		9/14/2010	22.85	Product Not Found	0	5.25
SWMU 62, New Housing Fuel Leak			MW-303-14		9/13/2011	22.52	DRO	0.01	5.57
SWMU 62, New Housing Fuel Leak			MW-303-14		9/10/2012	22.48	Product Not Found	0	5.62
SWMU 62, New Housing Fuel Leak	DOWNTOWN	542	MW-303-15	MW	05/11/2002	23.51	Product Not Found	0	6.29
SWMU 62, New Housing Fuel Leak	DOWNTOWN	543	MW-303-16	MW	05/11/2002	24.61	Product Not Found	0	5.61
SWMU 62, New Housing Fuel Leak	DOWNTOWN	543	MW-303-16	MW	08/29/2002	25.37			4.85
SWMU 62, New Housing Fuel Leak	DOWNTOWN	544	MW-303-17	MW	08/29/2001	26.67			4.06
SWMU 62, New Housing Fuel Leak	DOWNTOWN	544	MW-303-17	MW	05/11/2002	25.96	Product Not Found	0	4.77
SWMU 62, New Housing Fuel Leak	DOWNTOWN	545	MW-303-18	MW	08/29/2001	25.89	Diesel Sheen	0.01	4.14
SWMU 62, New Housing Fuel Leak	DOWNTOWN	545	MW-303-18	MW	10/15/2003	26.30	Undetermined	0.2	3.73
SWMU 62, New Housing Fuel Leak	DOWNTOWN	545	MW-303-18	MW	9/15/2006	26.68	Product Not Found	0	3.35
SWMU 62, New Housing Fuel Leak			MW-303-18		9/21/2007	26.03	Product Not Found	0	4.00
SWMU 62, New Housing Fuel Leak			MW-303-18		9/23/2008	25.67	Product Not Found	0	3.59
SWMU 62, New Housing Fuel Leak			MW-303-18		9/9/2009	25.37	Product Not Found	0	3.89
SWMU 62, New Housing Fuel Leak			MW-303-18		9/14/2010	25.65	Product Not Found	0	3.61
SWMU 62, New Housing Fuel Leak			MW-303-18		9/13/2011	25.47	Product Not Found	0	3.79
SWMU 62, New Housing Fuel Leak	DOWNTOWN	547	MW-303-20	MW	08/29/2001	24.78	Diesel	0.08	4.05
SWMU 62, New Housing Fuel Leak	DOWNTOWN	547	MW-303-20	MW	05/11/2002	23.98	Product Not Found	0	4.85
SWMU 62, New Housing Fuel Leak	DOWNTOWN	547	MW-303-20	MW	10/15/2003	24.94	Unknown Odor	0.01	3.89
SWMU 62, New Housing Fuel Leak	DOWNTOWN	548	MW-303-21	MW	08/29/2001	25.97	Diesel Sheen	0.01	4.12
SWMU 62, New Housing Fuel Leak	DOWNTOWN	548	MW-303-21	MW	05/11/2002	25.29	Product Not Found	0	4.80
SWMU 62, New Housing Fuel Leak	DOWNTOWN	548	MW-303-21	MW	10/15/2003	26.10	Undetermined	0.03	3.99
SWMU 62, New Housing Fuel Leak	DOWNTOWN	532	MW-303-5	MW	08/29/2001	24.32	Diesel Sheen	0.01	5.41
SWMU 62, New Housing Fuel Leak	DOWNTOWN	532	MW-303-5	MW	05/11/2002	23.54	Product Not Found	0	6.19
SWMU 62, New Housing Fuel Leak	DOWNTOWN	532	MW-303-5	MW	10/15/2003	24.82	Unknown Odor	0.04	4.91
SWMU 62, New Housing Fuel Leak	DOWNTOWN	532	MW-303-5	MW	9/14/2006	25.39	Product Not Found	0	4.34
SWMU 62, New Housing Fuel Leak			MW-303-5		9/24/2007	24.55	Product Not Found	0	5.18
SWMU 62, New Housing Fuel Leak			MW-303-5		9/23/2008	24.97	Product Not Found	0	4.76
SWMU 62, New Housing Fuel Leak			MW-303-5		9/9/2009	24.61	Product Not Found	0	5.12
SWMU 62, New Housing Fuel Leak			MW-303-5		9/14/2010	25.00	DRO	0.01	4.73
SWMU 62, New Housing Fuel Leak			MW-303-5		9/13/2011	24.72	Product Not Found	0	5.01
SWMU 62, New Housing Fuel Leak	DOWNTOWN	534	MW-303-7	MW	10/15/2003	22.24	Unknown Odor	0.16	4.87
SWMU 62, New Housing Fuel Leak	DOWNTOWN	534	MW-303-7	MW	9/14/2006	22.78	Product Not Found	0	4.33
SWMU 62, New Housing Fuel Leak			MW-303-7		9/24/2007	21.88	DRO	0.01	5.23
SWMU 62, New Housing Fuel Leak			MW-303-7		9/23/2008	22.05	Product Not Found	0	4.73
SWMU 62, New Housing Fuel Leak			MW-303-7		9/9/2009	21.73	Product Not Found	0	5.05
SWMU 62, New Housing Fuel Leak			MW-303-7		9/14/2010	22.09	Product Not Found	0	4.69
SWMU 62, New Housing Fuel Leak			MW-303-7		9/13/2011	21.84	Product Not Found	0	4.94
SWMU 62, New Housing Fuel Leak			MW-303-7		9/7/2013	21.80	Product Not Found	0	4.98
SWMU 62, New Housing Fuel Leak			MW-303-7		9/10/2012	21.72	Product Not Found	0	5.06
SWMU 62, New Housing Fuel Leak	DOWNTOWN	535	MW-303-8	MW	08/29/2001	23.17	Diesel	0.05	4.82
SWMU 62, New Housing Fuel Leak	DOWNTOWN	535	MW-303-8	MW	05/11/2002	22.32	Product Not Found	0	5.67

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak	DOWNTOWN	535	MW-303-8	MW	10/15/2003	24.15	Unknown Odor	0.76	3.84
SWMU 62, New Housing Fuel Leak	DOWNTOWN	535	MW-303-8	MW	9/14/2006	24.18	Product Not Found	0	3.81
SWMU 62, New Housing Fuel Leak			MW-303-8		9/26/2007	23.24	Product Not Found	0	4.75
SWMU 62, New Housing Fuel Leak			MW-303-8		9/23/2008	23.14	Product Not Found	0	4.25
SWMU 62, New Housing Fuel Leak			MW-303-8		9/9/2009	22.82	Product Not Found	0	4.57
SWMU 62, New Housing Fuel Leak			MW-303-8		9/14/2010	23.18	DRO	0.06	4.21
SWMU 62, New Housing Fuel Leak			MW-303-8		9/13/2011	22.92	Product Not Found	0	4.47
SWMU 62, New Housing Fuel Leak			MW-303-8		9/10/2012	22.82	Product Not Found	0	4.57
SWMU 62, New Housing Fuel Leak			MW-303-8		9/7/2013	22.93	DRO	0.08	4.45
SWMU 62, New Housing Fuel Leak			NW1		9/26/2006	8.61	Product Not Found	0	3.67
SWMU 62, New Housing Fuel Leak			RW-303-16/NW-1		9/21/2007	7.86	Product Not Found	0	3.16
SWMU 62, New Housing Fuel Leak			RW-303-16/NW-1		9/23/2008	8.36	Product Not Found	0	2.66
SWMU 62, New Housing Fuel Leak			RW-303-16/NW-1		9/9/2009	8.14	Product Not Found	0	2.88
SWMU 62, New Housing Fuel Leak			RW-303-16/NW-1		9/14/2010	8.34	Product Not Found	0	2.68
SWMU 62, New Housing Fuel Leak			RW-303-16/NW-1		9/13/2011	8.27	Product Not Found	0	2.75
SWMU 62, New Housing Fuel Leak			RW-303-16/NW-1		9/7/2013	7.79	Product Not Found	0	3.23
SWMU 62, New Housing Fuel Leak			RW-303-16/NW-1		9/10/2012	7.94	Product Not Found	0	3.08
SWMU 62, New Housing Fuel Leak			NW2		9/27/2006	NL	Product Not Found	0	-1.34
SWMU 62, New Housing Fuel Leak			RW-303-15/NW-2		9/24/2007	27.63	Product Not Found	TRACE	3.63
SWMU 62, New Housing Fuel Leak			RW-303-15/NW-2		9/23/2008	28.02	DRO	0.01	3.24
SWMU 62, New Housing Fuel Leak			RW-303-15/NW-2		9/9/2009	27.74	DRO	0.01	3.52
SWMU 62, New Housing Fuel Leak			RW-303-15/NW-2		9/14/2010	28.00	DRO	0.01	3.26
SWMU 62, New Housing Fuel Leak			RW-303-15/NW-2		9/13/2011	27.84	Product Not Found	0	3.42
SWMU 62, New Housing Fuel Leak			RW-303-15/NW-2		9/10/2012	27.67	Product Not Found	0	3.59
SWMU 62, New Housing Fuel Leak			RW-303-15/NW-2		9/7/2013	27.55	Product Not Found	0	3.71
SWMU 62, New Housing Fuel Leak			NW3		9/27/2006	8.44	Product Not Found	0	7.26
SWMU 62, New Housing Fuel Leak			RW-303-14/NW-3		9/22/2007	7.99	Product Not Found	0	2.54
SWMU 62, New Housing Fuel Leak			RW-303-14/NW-3		9/23/2008	8.30	Product Not Found	0	2.23
SWMU 62, New Housing Fuel Leak			RW-303-14/NW-3		9/9/2009	8.11	DRO	0.01	2.42
SWMU 62, New Housing Fuel Leak			RW-303-14/NW-3		9/14/2010	8.23	Product Not Found	0	2.30
SWMU 62, New Housing Fuel Leak			RW-303-14/NW-3		9/13/2011	8.21	Product Not Found	0	2.32
SWMU 62, New Housing Fuel Leak			RW-303-14/NW-3		9/7/2013	7.73	Product Not Found	0	2.80
SWMU 62, New Housing Fuel Leak			RW-303-14/NW-3		9/10/2012	7.96	Product Not Found	0	2.57
SWMU 62, New Housing Fuel Leak			NW4		9/14/2006	7.16		NM	NM
SWMU 62, New Housing Fuel Leak			RW-303-13/NW-4		9/22/2007	6.92	DRO	0.01	2.06
SWMU 62, New Housing Fuel Leak			RW-303-13/NW-4		9/23/2008	7.08	Product Not Found	0	1.90
SWMU 62, New Housing Fuel Leak			RW-303-13/NW-4		9/9/2009	6.97	DRO	0.01	2.01
SWMU 62, New Housing Fuel Leak			RW-303-13/NW-4		9/14/2010	7.02	Product Not Found	TRACE	1.96
SWMU 62, New Housing Fuel Leak			RW-303-13/NW-4		9/13/2011	6.97	Product Not Found	0	2.01
SWMU 62, New Housing Fuel Leak			RW-303-13/NW-4		9/10/2012	6.88	Product Not Found	0	2.10
SWMU 62, New Housing Fuel Leak			RW-303-13/NW-4		9/7/2013	6.44	Product Not Found	0	2.54
SWMU 62, New Housing Fuel Leak	DOWNTOWN	770	RW-102-1	RW	08/30/2001	17.73			8.75
SWMU 62, New Housing Fuel Leak	DOWNTOWN	771	RW-102-2	RW	08/30/2001	18.83			9.10
SWMU 62, New Housing Fuel Leak	DOWNTOWN	771	RW-102-2	RW	9/23/2006	NM		NM	NM
SWMU 62, New Housing Fuel Leak			RW-102-2		9/24/2007	19.53	Product Not Found	0	8.40
SWMU 62, New Housing Fuel Leak	DOWNTOWN	772	RW-102-3	RW	08/29/2001	15.99			6.86
SWMU 62, New Housing Fuel Leak	DOWNTOWN	773	RW-102-4	RW	08/29/2001	18.52	Diesel	0.01	6.76
SWMU 62, New Housing Fuel Leak	DOWNTOWN	773	RW-102-4	RW	9/15/2006	20.02	Product Not Found	0	5.26
SWMU 62, New Housing Fuel Leak			RW-102-4		9/19/2007	19.30	Product Not Found	0	5.98
SWMU 62, New Housing Fuel Leak			RW-102-4		9/4/2009	19.02	Product Not Found	0	6.26

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak			RW-102-4		9/13/2010	19.58	DRO	0.01	5.70
SWMU 62, New Housing Fuel Leak			RW-102-4		9/12/2011	19.09	Product Not Found	0	6.19
SWMU 62, New Housing Fuel Leak			RW-102-4		9/8/2012	19.14	Product Not Found	0	6.14
SWMU 62, New Housing Fuel Leak			RW-102-4		9/10/2013	19.51	Product Not Found	0	5.77
SWMU 62, New Housing Fuel Leak	DOWNTOWN	850	RW-107-1	RW	08/30/2001	17.32			9.06
SWMU 62, New Housing Fuel Leak	DOWNTOWN	851	RW-107-2	RW	08/30/2001	16.72			8.56
SWMU 62, New Housing Fuel Leak	DOWNTOWN	852	RW-107-3	RW	08/30/2001	15.82			9.84
SWMU 62, New Housing Fuel Leak	DOWNTOWN	854	RW-107-4	RW	08/30/2001	16.85			7.72
SWMU 62, New Housing Fuel Leak	DOWNTOWN	650	RW-134-1	RW	08/29/2001	19.69			8.08
SWMU 62, New Housing Fuel Leak	DOWNTOWN	658	RW-139-1 (RW-146-5	RW	08/29/2001	14.95			13.04
SWMU 62, New Housing Fuel Leak	DOWNTOWN	867	RW-146-1	RW	08/30/2001	16.28			10.05
SWMU 62, New Housing Fuel Leak	DOWNTOWN	868	RW-146-2	RW	08/30/2001	17.42			9.26
SWMU 62, New Housing Fuel Leak	DOWNTOWN	869	RW-146-3	RW	08/30/2001	16.01			9.33
SWMU 62, New Housing Fuel Leak	DOWNTOWN	870	RW-146-4	RW	08/30/2001	16.26			7.60
SWMU 62, New Housing Fuel Leak	DOWNTOWN	589	RW-303-1	RW	08/29/2001	23.90			6.10
SWMU 62, New Housing Fuel Leak	DOWNTOWN	589	RW-303-1	RW	05/11/2002	23.07	Product Not Found	0	6.93
SWMU 62, New Housing Fuel Leak	DOWNTOWN	586	RW-303-10	RW	08/29/2001	23.36			4.52
SWMU 62, New Housing Fuel Leak	DOWNTOWN	587	RW-303-11	RW	08/29/2001	25.13			4.45
SWMU 62, New Housing Fuel Leak	DOWNTOWN	587	RW-303-11	RW	9/15/2006	25.82	Product Not Found	0	3.76
SWMU 62, New Housing Fuel Leak			RW-303-11		9/24/2007	25.36	DRO	0.02	4.22
SWMU 62, New Housing Fuel Leak			RW-303-11		9/23/2008	25.74	Product Not Found	0	3.84
SWMU 62, New Housing Fuel Leak			RW-303-11		9/9/2009	25.38	DRO	0.01	4.20
SWMU 62, New Housing Fuel Leak			RW-303-11		9/14/2010	25.71	Product Not Found	0	3.87
SWMU 62, New Housing Fuel Leak			RW-303-11		9/13/2011	25.48	Product Not Found	0	4.10
SWMU 62, New Housing Fuel Leak	DOWNTOWN	588	RW-303-12	RW	08/29/2001	24.75	Diesel	0.06	4.03
SWMU 62, New Housing Fuel Leak	DOWNTOWN	588	RW-303-12	RW	05/11/2002	24.00	Product Not Found	0	4.78
SWMU 62, New Housing Fuel Leak	DOWNTOWN	588	RW-303-12	RW	9/15/2006	25.73		0.31	3.05
SWMU 62, New Housing Fuel Leak			RW-303-12		9/24/2007	24.87	DRO	0.04	3.91
SWMU 62, New Housing Fuel Leak			RW-303-12		9/23/2008	25.25	Product Not Found	0	3.52
SWMU 62, New Housing Fuel Leak			RW-303-12		9/9/2009	24.93	Product Not Found	0	3.85
SWMU 62, New Housing Fuel Leak			RW-303-12		9/14/2010	25.21	Product Not Found	0	3.57
SWMU 62, New Housing Fuel Leak			RW-303-12		9/13/2011	25.03	Product Not Found	0	3.75
SWMU 62, New Housing Fuel Leak	DOWNTOWN	590	RW-303-2	RW	08/29/2001	23.50			4.88
SWMU 62, New Housing Fuel Leak	DOWNTOWN	590	RW-303-2	RW	05/11/2002	22.68	Product Not Found	0	5.70
SWMU 62, New Housing Fuel Leak	DOWNTOWN	569	RW-303-3	RW	08/29/2001	22.42			5.45
SWMU 62, New Housing Fuel Leak	DOWNTOWN	569	RW-303-3	RW	05/11/2002	21.63	Product Not Found	0	6.24
SWMU 62, New Housing Fuel Leak	DOWNTOWN	591	RW-303-4	RW	08/29/2001	22.50	Diesel	0.74	5.39
SWMU 62, New Housing Fuel Leak	DOWNTOWN	591	RW-303-4	RW	9/14/2006	23.54		0.8	4.35
SWMU 62, New Housing Fuel Leak			RW-303-4		9/24/2007	21.99	DRO	0.07	5.90
SWMU 62, New Housing Fuel Leak			RW-303-4		9/23/2008	22.53	DRO	0.08	5.36
SWMU 62, New Housing Fuel Leak			RW-303-4		9/9/2009	22.19	Product Not Found	0	5.70
SWMU 62, New Housing Fuel Leak			RW-303-4		9/14/2010	22.53	DRO	0.02	5.36
SWMU 62, New Housing Fuel Leak			RW-303-4		9/13/2011	22.28	Product Not Found	0	5.61
SWMU 62, New Housing Fuel Leak			RW-303-4		9/10/2012	22.15	Product Not Found	0	5.74
SWMU 62, New Housing Fuel Leak			RW-303-4		9/7/2013	22.26	DRO	0.03	5.63
SWMU 62, New Housing Fuel Leak	DOWNTOWN	592	RW-303-5	RW	08/29/2001	23.62			6.13
SWMU 62, New Housing Fuel Leak	DOWNTOWN	592	RW-303-5	RW	05/11/2002	22.79	Product Not Found	0	6.96
SWMU 62, New Housing Fuel Leak	DOWNTOWN	570	RW-303-6	RW	05/11/2002	21.24	DRO	0.18	7.85
SWMU 62, New Housing Fuel Leak	DOWNTOWN	570	RW-303-6	RW	05/11/2002	22.14	Product Not Found	0	6.95
SWMU 62, New Housing Fuel Leak	DOWNTOWN	570	RW-303-6	RW	9/14/2006	24.27	Product Not Found	0	4.82

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
SWMU 62, New Housing Fuel Leak			RW-303-6		9/24/2007	23.45	Product Not Found	0	5.64
SWMU 62, New Housing Fuel Leak			RW-303-6		9/23/2008	23.87	Product Not Found	0	5.22
SWMU 62, New Housing Fuel Leak			RW-303-6		9/9/2009	23.49	Product Not Found	0	5.60
SWMU 62, New Housing Fuel Leak			RW-303-6		9/14/2010	24.90	Product Not Found	0	4.19
SWMU 62, New Housing Fuel Leak			RW-303-6		9/13/2011	23.62	Product Not Found	0	5.47
SWMU 62, New Housing Fuel Leak			RW-303-6		9/10/2012	23.53	Product Not Found	0	5.56
SWMU 62, New Housing Fuel Leak	DOWNTOWN	583	RW-303-7	RW	08/29/2001	22.51	Diesel	0.1	4.10
SWMU 62, New Housing Fuel Leak	DOWNTOWN	583	RW-303-7	RW	05/11/2002	21.71	Diesel	0.01	4.90
SWMU 62, New Housing Fuel Leak	DOWNTOWN	583	RW-303-7	RW	9/15/2006	23.30	Product Not Found	0	3.31
SWMU 62, New Housing Fuel Leak			RW-303-7		9/21/2007	22.51	DRO	0.04	4.10
SWMU 62, New Housing Fuel Leak			RW-303-7		9/23/2008	22.94	Product Not Found	0	3.67
SWMU 62, New Housing Fuel Leak			RW-303-7		9/9/2009	22.67	DRO	0.01	3.94
SWMU 62, New Housing Fuel Leak			RW-303-7		9/14/2010	22.99	DRO	0.01	3.62
SWMU 62, New Housing Fuel Leak			RW-303-7		9/13/2011	22.78	Product Not Found	0	3.83
SWMU 62, New Housing Fuel Leak			RW-303-7		9/10/2012	22.62	Product Not Found	0	3.99
SWMU 62, New Housing Fuel Leak	DOWNTOWN	584	RW-303-8	RW	08/29/2001	24.53			3.92
SWMU 62, New Housing Fuel Leak	DOWNTOWN	584	RW-303-8	RW	05/11/2002	23.85	Product Not Found	0	4.60
SWMU 62, New Housing Fuel Leak	DOWNTOWN	585	RW-303-9	RW	08/29/2001	24.62	Diesel Sheen	0.01	3.72
SWMU 62, New Housing Fuel Leak	DOWNTOWN	585	RW-303-9	RW	05/11/2002	23.96	Product Not Found	0	4.38
SWMU 62, New Housing Fuel Leak	DOWNTOWN	585	RW-303-9	RW	9/15/2006	25.35	Product Not Found	0	2.99
SWMU 62, New Housing Fuel Leak			RW-303-9		9/21/2007	25.04	DRO	2.01	3.30
SWMU 62, New Housing Fuel Leak			RW-303-9		9/23/2008	25.08	Product Not Found	0	3.26
SWMU 62, New Housing Fuel Leak			RW-303-9		9/9/2009	24.81	DRO	0.01	3.53
SWMU 62, New Housing Fuel Leak			RW-303-9		9/14/2010	25.07	Product Not Found	0	3.27
SWMU 62, New Housing Fuel Leak			RW-303-9		9/13/2011	24.93	Product Not Found	0	3.41
SWMU 62, New Housing Fuel Leak			RW-303-9		9/10/2012	24.71	Product Not Found	0	3.63
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	05/12/2001	4.79			6.55
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	05/14/2001	4.81			6.53
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	05/18/2001	5.01			6.33
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	05/28/2001	5.37			5.97
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	05/31/2001	4.79			6.55
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	06/01/2001	5.47	Product Not Found	0	5.87
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	06/15/2001	5.88	Product Not Found	0	5.46
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	06/22/2001	5.54	Product Not Found	0	5.80
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	06/29/2001	5.81	Product Not Found	0	5.53
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	07/06/2001	5.91	Product Not Found	0	5.43
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	07/13/2001	5.89	Product Not Found	0	5.45
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	07/20/2001	6.11	Product Not Found	0	5.23
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	07/27/2001	6.24	Product Not Found	0	5.10
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/03/2001	6.34	Product Not Found	0	5.00
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/10/2001	6.35	Product Not Found	0	4.99
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/17/2001	6.50	Product Not Found	0	4.84
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/24/2001	6.52	Product Not Found	0	4.82
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/31/2001	6.59	Product Not Found	0	4.75
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	09/07/2001	6.67	Product Not Found	0	4.67
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	10/05/2001	6.42	Mix Sheen	0.01	4.92
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	10/12/2001	6.42	Product Not Found	0	4.92
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	10/19/2001	6.27	Product Not Found	0	5.07
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	10/26/2001	6.38	Product Not Found	0	4.96
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	11/02/2001	6.17	Product Not Found	0	5.17

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	11/02/2001	6.17	Product Not Found	0	5.17
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	11/09/2001	5.89	Product Not Found	0	5.45
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	05/21/2003	6.35	Product Not Found	0	4.99
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/03/2004	6.71	Product Not Found	0	4.63
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/09/2004	6.85	Product Not Found	0	4.49
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/13/2004	6.90	Product Not Found	0	4.44
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/17/2004	6.85	Product Not Found	0	4.49
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/20/2004	6.90			4.44
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/23/2004	6.95	Product Not Found	0	4.39
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/27/2004	7.02	Product Not Found	0	4.32
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	08/31/2004	7.11	Product Not Found	0	4.23
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	09/03/2004	7.11	Product Not Found	0	4.23
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	09/07/2004	7.07	Product Not Found	0	4.27
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	09/10/2004	7.06	Product Not Found	0	4.28
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	09/14/2004	7.17	Product Not Found	0	4.17
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	09/21/2004	7.25	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	09/27/2004	7.08	Product Not Found	0	4.26
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	10/22/2004	6.45	Product Not Found	0	4.89
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	11/02/2004	6.20	Product Not Found	0	5.14
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	12/03/2004	5.68	Product Not Found	0	5.66
Tanker Shed, UST 42494	E-RWAY	175	04-175	RW	9/10/2005	6.91		0	4.43
Tanker Shed, UST 42494	E-RWAY	175	04-175		9/19/2006	7.55		0	3.79
Tanker Shed, UST 42494	E-RWAY	175	04-175		9/10/2007	6.67	DRO	0.01	4.67
Tanker Shed, UST 42494	E-RWAY	175	04-175		9/17/2008	7.26	Product Not Found	0	4.08
Tanker Shed, UST 42494	E-RWAY	175	04-175		9/3/2009	6.79	Product Not Found	0	4.55
Tanker Shed, UST 42494	E-RWAY	175	04-175		9/2/2010	7.19	Product Not Found	0	4.15
Tanker Shed, UST 42494	E-RWAY	175	04-175		8/30/2011	6.85	Product Not Found	0	4.49
Tanker Shed, UST 42494	E-RWAY	175	04-175		8/31/2012	6.96	Product Not Found	0	4.38
Tanker Shed, UST 42494	E-RWAY	175	04-175		9/3/2013	6.85	Product Not Found	0	4.49
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	05/14/2001	4.99			6.34
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	05/18/2001	5.27			6.06
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	05/28/2001	5.58			5.75
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	06/01/2001	5.71	Product Not Found	0	5.62
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	06/15/2001	6.09	Product Not Found	0	5.24
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	06/22/2001	5.75	Product Not Found	0	5.58
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	06/29/2001	6.00	Product Not Found	0	5.33
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	07/06/2001	6.10	Product Not Found	0	5.23
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	07/13/2001	6.09	Product Not Found	0	5.24
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	07/20/2001	6.28	Product Not Found	0	5.05
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	07/27/2001	6.43	Product Not Found	0	4.90
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/03/2001	6.46	Product Not Found	0	4.87
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/10/2001	6.54	Product Not Found	0	4.79
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/17/2001	6.68	Product Not Found	0	4.65
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/24/2001	6.69	Product Not Found	0	4.64
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/31/2001	6.78	Product Not Found	0	4.55
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	09/07/2001	6.84	Product Not Found	0	4.49
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	10/12/2001	6.52	Product Not Found	0	4.81
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	10/19/2001	6.44	Product Not Found	0	4.89
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	10/26/2001	6.54	Product Not Found	0	4.79
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	11/02/2001	6.31	Product Not Found	0	5.02

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	11/09/2001	6.03	Product Not Found	0	5.30
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	05/21/2003	10.66	Diesel	0.01	0.67
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/03/2004	10.97	Product Not Found	0	0.36
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/09/2004	11.80	Product Not Found	0	-0.47
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/13/2004	7.07	Product Not Found	0	4.26
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/17/2004	6.69	Product Not Found	0	4.64
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/20/2004	7.04			4.29
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/23/2004	7.09	Product Not Found	0	4.24
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/27/2004	7.17	Product Not Found	0	4.16
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	08/31/2004	7.25	Product Not Found	0	4.08
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	09/03/2004	7.25	Product Not Found	0	4.08
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	09/07/2004	7.21	Product Not Found	0	4.12
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	09/10/2004	7.23	Product Not Found	0	4.10
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	09/14/2004	7.30	Product Not Found	0	4.03
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	09/21/2004	7.39	Product Not Found	0	3.94
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	09/27/2004	7.21	Mix Sheen	0.01	4.12
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	10/22/2004	6.33	Product Not Found	0	5.00
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	11/02/2004	6.38	Product Not Found	0	4.95
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	12/03/2004	5.88	Product Not Found	0	5.45
Tanker Shed, UST 42494	E-RWAY	176	04-176	RW	9/10/2005	7.09		0	4.24
Tanker Shed, UST 42494	E-RWAY	176	04-176		9/14/2006	7.95		0.31	3.38
Tanker Shed, UST 42494	E-RWAY	176	04-176		9/11/2007	6.74	Product Not Found	0	4.59
Tanker Shed, UST 42494	E-RWAY	176	04-176		9/17/2008	7.41	Product Not Found	0	3.92
Tanker Shed, UST 42494	E-RWAY	176	04-176		9/3/2009	6.96	Product Not Found	0	4.37
Tanker Shed, UST 42494	E-RWAY	176	04-176		9/2/2010	7.34	Product Not Found	0	3.99
Tanker Shed, UST 42494	E-RWAY	176	04-176		8/30/2011	7.01	Product Not Found	0	4.32
Tanker Shed, UST 42494	E-RWAY	176	04-176		8/31/2012	7.11	Product Not Found	0	4.22
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	05/21/2003	6.43	Product Not Found	0	4.89
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	08/03/2004	6.75	Product Not Found	0	4.57
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	08/09/2004	6.90	Product Not Found	0	4.42
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	08/13/2004	6.95	Product Not Found	0	4.37
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	08/17/2004	6.85	Product Not Found	0	4.47
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	08/20/2004	6.97			4.35
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	08/23/2004	6.99	Product Not Found	0	4.33
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	08/27/2004	7.08	Product Not Found	0	4.24
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	08/31/2004	7.18	Product Not Found	0	4.14
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	09/03/2004	7.15	Product Not Found	0	4.17
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	09/07/2004	7.10	Mix Sheen	0.01	4.22
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	09/10/2004	7.12	Mixed Product	0.01	4.20
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	09/14/2004	7.18	Product Not Found	0	4.14
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	09/21/2004	7.28	Product Not Found	0	4.04
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	09/27/2004	7.10	Product Not Found	0	4.22
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	10/22/2004	6.43	Product Not Found	0	4.89
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	11/02/2004	6.15	Product Not Found	0	5.17
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	12/03/2004	5.70	Product Not Found	0	5.62
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	9/10/2005	7.00		0	4.32
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	9/14/2006	7.58		0.01	3.74
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	9/11/2007	6.65	Product Not Found	0	4.67
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	9/17/2008	7.33	Product Not Found	0	3.99
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	9/3/2009	6.82	Product Not Found	0	4.50

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	9/2/2010	7.23	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	8/30/2011	6.93	Product Not Found	0	4.39
Tanker Shed, UST 42494	E-RWAY	178	04-178	RW	8/31/2012	7.02	Product Not Found	0	4.30
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	05/14/2001	5.71			5.48
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	05/18/2001	5.85			5.34
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	05/28/2001	6.14			5.05
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	06/01/2001	6.24	Product Not Found	0	4.95
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	06/15/2001	6.57	Product Not Found	0	4.62
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	06/22/2001	6.21	Product Not Found	0	4.98
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	06/29/2001	6.45	Product Not Found	0	4.74
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	07/06/2001	6.54	Product Not Found	0	4.65
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	07/13/2001	6.53	Product Not Found	0	4.66
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	07/20/2001	6.71	Product Not Found	0	4.48
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	07/27/2001	6.84	Product Not Found	0	4.35
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	08/03/2001	8.88	Product Not Found	0	2.31
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	08/10/2001	6.92	Product Not Found	0	4.27
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	08/17/2001	7.06	Product Not Found	0	4.13
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	08/24/2001	7.07	Product Not Found	0	4.12
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	08/31/2001	7.13	Product Not Found	0	4.06
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	09/07/2001	7.20	Product Not Found	0	3.99
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	10/05/2001	6.41	Product Not Found	0	4.78
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	10/12/2001	6.95	Product Not Found	0	4.24
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	10/19/2001	6.79	Product Not Found	0	4.40
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	10/26/2001	6.95	Product Not Found	0	4.24
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	11/02/2001	6.74	Product Not Found	0	4.45
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	11/02/2001	6.74	Product Not Found	0	4.45
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	11/09/2001	6.52	Product Not Found	0	4.67
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	05/21/2003	6.95	Product Not Found	0	4.24
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	9/10/2005	7.40		0	3.79
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	9/19/2006	7.95	Product Not Found	0	3.24
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	9/10/2007	7.19	Product Not Found	0	4.00
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	9/17/2008	7.66	Product Not Found	0	3.53
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	9/3/2009	7.28	Product Not Found	0	3.91
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	9/2/2010	7.35	Product Not Found	0	3.84
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	8/30/2011	7.35	Product Not Found	0	3.84
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	8/31/2012	7.41	Product Not Found	0	3.78
Tanker Shed, UST 42494	E-RWAY	290	04-290	MW	9/3/2013	7.22	Product Not Found	0	3.97
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	05/14/2001	4.78			6.57
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	05/28/2001	5.52			5.83
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	06/01/2001	5.61	Mix Sheen	0.01	5.74
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	06/15/2001	6.00	Product Not Found	0	5.35
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	06/22/2001	5.67	Product Not Found	0	5.68
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	06/29/2001	5.92	Product Not Found	0	5.43
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	07/06/2001	6.02	Product Not Found	0	5.33
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	07/13/2001	6.03	Product Not Found	0	5.32
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	07/20/2001	6.20	Product Not Found	0	5.15
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	07/27/2001	6.37	Product Not Found	0	4.98
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/03/2001	6.44	Product Not Found	0	4.91
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/10/2001	6.53	Product Not Found	0	4.82
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/17/2001	6.67	Product Not Found	0	4.68

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/24/2001	6.69	Product Not Found	0	4.66
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/31/2001	6.77	Product Not Found	0	4.58
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	09/07/2001	6.76	Product Not Found	0	4.59
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	10/05/2001	6.68	Mix Sheen	0.01	4.67
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	10/12/2001	6.48	Product Not Found	0	4.87
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	10/19/2001	6.44	Product Not Found	0	4.91
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	10/26/2001	6.55	Product Not Found	0	4.80
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	11/02/2001	6.36	Product Not Found	0	4.99
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	11/09/2001	6.09	Product Not Found	0	5.26
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	05/21/2003	6.48	Diesel	0.01	4.87
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/03/2004	6.85	Product Not Found	0	4.50
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/09/2004	7.02	Product Not Found	0	4.33
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/13/2004	7.06	Product Not Found	0	4.29
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/17/2004	6.93	Product Not Found	0	4.42
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/20/2004	7.05			4.30
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/23/2004	7.02	Product Not Found	0	4.33
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/27/2004	7.11	Product Not Found	0	4.24
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	08/31/2004	7.26	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	09/03/2004	7.20	Product Not Found	0	4.15
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	09/07/2004	7.14	Mix Sheen	0.01	4.21
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	09/10/2004	7.16	Product Not Found	0	4.19
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	09/14/2004	7.23	Product Not Found	0	4.12
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	09/21/2004	7.33	Product Not Found	0	4.02
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	09/27/2004	7.15	Product Not Found	0	4.20
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	10/22/2004	6.50	Product Not Found	0	4.85
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	11/02/2004	6.40	Product Not Found	0	4.95
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	12/03/2004	5.81	Product Not Found	0	5.54
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	9/10/2005	7.02		0	4.33
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	9/14/2006	7.63	Product Not Found	0	3.72
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	9/11/2007	6.70	Product Not Found	0	4.65
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	9/17/2008	7.35	Product Not Found	0	4.00
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	9/3/2009	6.89	Product Not Found	0	4.46
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	9/2/2010	7.30	Product Not Found	0	4.05
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	8/30/2011	7.02	DRO	0.01	4.33
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	8/31/2012	7.06	DRO	TRACE	4.29
Tanker Shed, UST 42494	E-RWAY	301	04-301	RW	9/3/2013	6.94	Product Not Found	0	4.41
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	11/02/2001	6.05	Product Not Found	0	5.08
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	05/21/2003	6.26	Diesel	0.01	4.87
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	08/03/2004	6.64	Product Not Found	0	4.49
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	08/09/2004	6.71	Product Not Found	0	4.42
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	08/13/2004	6.79	Product Not Found	0	4.34
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	08/17/2004	6.70	Product Not Found	0	4.43
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	08/20/2004	6.76			4.37
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	08/23/2004	6.81	Product Not Found	0	4.32
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	08/27/2004	6.86	Product Not Found	0	4.27
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	08/31/2004	6.98	Product Not Found	0	4.15
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	09/03/2004	6.98	Product Not Found	0	4.15
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	09/07/2004	6.92	Mix Sheen	0.01	4.21
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	09/10/2004	6.93	Mix Sheen	0.01	4.20
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	09/14/2004	7.02	Product Not Found	0	4.11

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	09/21/2004	7.11	Product Not Found	0	4.02
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	09/27/2004	6.92	Product Not Found	0	4.21
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	10/22/2004	6.51	Product Not Found	0	4.62
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	11/02/2004	6.21	Product Not Found	0	4.92
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	12/03/2004	5.66	Product Not Found	0	5.47
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	9/10/2005	6.80		0	4.33
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	9/14/2006	7.42	Product Not Found	0	3.71
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	9/11/2007	6.50	Product Not Found	0	4.63
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	9/17/2008	7.16	Product Not Found	0	3.97
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	9/3/2009	6.67	Product Not Found	0	4.46
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	9/2/2010	7.04	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	8/30/2011	6.78	Product Not Found	0	4.35
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	8/31/2012	7.82	Product Not Found	0	3.31
Tanker Shed, UST 42494	E-RWAY	302	04-302	RW	9/3/2013	6.70	Product Not Found	0	4.43
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	11/02/2001	6.05	Product Not Found	0	5.08
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	05/21/2003	6.70	Diesel	0.08	4.43
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	08/03/2004	6.59	Product Not Found	0	4.54
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	08/09/2004	6.74	Product Not Found	0	4.39
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	08/13/2004	6.78	Product Not Found	0	4.35
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	08/17/2004	6.67	Product Not Found	0	4.46
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	08/20/2004	6.81			4.32
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	08/23/2004	6.87	Product Not Found	0	4.26
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	08/27/2004	6.92	Product Not Found	0	4.21
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	08/31/2004	6.99	Product Not Found	0	4.14
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	09/03/2004	7.00	Product Not Found	0	4.13
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	09/07/2004	6.96	Product Not Found	0	4.17
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	09/10/2004	6.95	Mix Sheen	0.01	4.18
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	09/14/2004	7.04	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	09/21/2004	7.13	Product Not Found	0	4.00
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	09/27/2004	6.97	Product Not Found	0	4.16
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	10/22/2004	6.61	Product Not Found	0	4.52
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	11/02/2004	6.18	Product Not Found	0	4.95
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	12/03/2004	5.49	Product Not Found	0	5.64
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	9/10/2005	6.79		0	4.34
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	9/14/2006	7.38	Product Not Found	0	3.75
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	9/11/2007	6.45	Product Not Found	0	4.68
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	9/17/2008	7.12	Product Not Found	0	4.01
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	9/3/2009	6.66	DRO	0.01	4.47
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	9/2/2010	7.05	DRO	0.01	4.08
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	8/30/2011	6.73	Product Not Found	0	4.40
Tanker Shed, UST 42494	E-RWAY	303	04-303	RW	8/31/2012	6.83	Product Not Found	0	4.30
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	11/02/2001	6.28	Product Not Found	0	4.92
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	05/21/2003	6.50	Product Not Found	0	4.70
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	08/03/2004	6.83	Product Not Found	0	4.37
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	08/09/2004	6.98	Product Not Found	0	4.22
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	08/13/2004	6.99	Product Not Found	0	4.21
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	08/17/2004	6.92	Product Not Found	0	4.28
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	08/20/2004	6.98			4.22
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	08/23/2004	7.02	Product Not Found	0	4.18
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	08/27/2004	7.11	Product Not Found	0	4.09

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	08/31/2004	7.18	Product Not Found	0	4.02
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	09/03/2004	7.18	Product Not Found	0	4.02
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	09/07/2004	7.14	Product Not Found	0	4.06
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	09/10/2004	7.15	Product Not Found	0	4.05
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	09/14/2004	7.23	Product Not Found	0	3.97
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	09/21/2004	7.32	Product Not Found	0	3.88
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	09/27/2004	7.14	Product Not Found	0	4.06
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	10/22/2004	6.50	Product Not Found	0	4.70
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	11/02/2004	6.20	Product Not Found	0	5.00
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	12/03/2004	5.82	Product Not Found	0	5.38
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	9/10/2005	7.02		0	4.18
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	9/14/2006	7.50	Product Not Found	0	3.70
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	9/11/2007	6.68	DRO	0.01	4.52
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	9/17/2008	7.30	Product Not Found	0	3.90
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	9/3/2009	6.89	Product Not Found	0	4.31
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	9/2/2010	7.27	Product Not Found	0	3.93
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	8/30/2011	6.95	Product Not Found	0	4.25
Tanker Shed, UST 42494	E-RWAY	304	04-304	RW	8/31/2012	7.03	Product Not Found	0	4.17
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/12/2001	5.56	Mixed Product	0.03	5.61
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/14/2001	5.52	Mix Sheen	0.01	5.65
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/17/2001	5.66	Mixed Product	0.01	5.51
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/18/2001	5.71	Mixed Product	0.03	5.46
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/19/2001	5.78	Mixed Product	0.05	5.39
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/21/2001	5.77	Mixed Product	0.01	5.40
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/22/2001	5.81	Product Not Found	0	5.36
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/23/2001	5.85	Mixed Product	0.01	5.32
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/24/2001	5.90	Mixed Product	0.03	5.27
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/25/2001	5.90			5.27
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/28/2001	6.00			5.17
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/29/2001	6.02			5.15
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/30/2001	6.15			5.02
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/31/2001	6.09			5.08
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/01/2001	6.11	Mix Sheen	0.01	5.06
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/02/2001	6.14	Product Not Found	0	5.03
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/04/2001	6.21	Product Not Found	0	4.96
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/08/2001	6.32	Product Not Found	0	4.85
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/09/2001	6.34	Product Not Found	0	4.83
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/11/2001	6.40	Product Not Found	0	4.77
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/12/2001	6.43	Product Not Found	0	4.74
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/13/2001	6.45	Product Not Found	0	4.72
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/14/2001	6.48	Product Not Found	0	4.69
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/15/2001	6.50	Product Not Found	0	4.67
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/16/2001	6.52	Product Not Found	0	4.65
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/18/2001	6.31	Product Not Found	0	4.86
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/19/2001	6.36	Product Not Found	0	4.81
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/20/2001	6.44	Product Not Found	0	4.73
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/21/2001	6.32	Product Not Found	0	4.85
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/22/2001	6.16	Product Not Found	0	5.01
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/23/2001	6.14	Product Not Found	0	5.03
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/25/2001	6.32	Product Not Found	0	4.85

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/26/2001	6.38	Product Not Found	0	4.79
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/27/2001	6.36	Product Not Found	0	4.81
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/28/2001	6.34	Product Not Found	0	4.83
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/29/2001	6.41	Product Not Found	0	4.76
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	06/30/2001	6.42	Product Not Found	0	4.75
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/02/2001	6.48	Product Not Found	0	4.69
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/03/2001	6.41	Product Not Found	0	4.76
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/04/2001	6.42	Product Not Found	0	4.75
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/05/2001	6.48	Product Not Found	0	4.69
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/06/2001	6.51	Product Not Found	0	4.66
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/07/2001	6.54	Product Not Found	0	4.63
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/09/2001	6.56	Product Not Found	0	4.61
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/10/2001	6.58	Mixed Product	0.01	4.59
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/11/2001	6.61	Product Not Found	0	4.56
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/12/2001	6.57	Product Not Found	0	4.60
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/13/2001	6.51	Product Not Found	0	4.66
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/14/2001	6.52	Product Not Found	0	4.65
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/16/2001	6.62	Product Not Found	0	4.55
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/17/2001	6.63	Product Not Found	0	4.54
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/18/2001	6.64	Product Not Found	0	4.53
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/19/2001	6.68	Product Not Found	0	4.49
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/20/2001	6.69	Product Not Found	0	4.48
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/21/2001	6.71	Product Not Found	0	4.46
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/23/2001	6.77	Product Not Found	0	4.40
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/24/2001	6.78	Product Not Found	0	4.39
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/25/2001	6.80	Product Not Found	0	4.37
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/26/2001	6.81	Product Not Found	0	4.36
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/27/2001	6.82	Product Not Found	0	4.35
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/28/2001	6.85	Product Not Found	0	4.32
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/30/2001	6.89	Product Not Found	0	4.28
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	07/31/2001	6.91	Product Not Found	0	4.26
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/01/2001	6.91	Product Not Found	0	4.26
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/03/2001	6.93	Product Not Found	0	4.24
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/04/2001	6.91	Product Not Found	0	4.26
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/06/2001	6.81	Product Not Found	0	4.36
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/07/2001	6.81	Product Not Found	0	4.36
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/08/2001	6.87	Product Not Found	0	4.30
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/09/2001	6.89	Product Not Found	0	4.28
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/10/2001	6.93	Product Not Found	0	4.24
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/11/2001	6.97	Mixed Product	0.01	4.20
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/13/2001	7.02	Product Not Found	0	4.15
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/14/2001	7.01	Product Not Found	0	4.16
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/15/2001	7.03	Product Not Found	0	4.14
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/16/2001	7.04	Product Not Found	0	4.13
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/17/2001	7.06	Product Not Found	0	4.11
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/18/2001	7.08	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/20/2001	7.03	Product Not Found	0	4.14
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/21/2001	7.06	Product Not Found	0	4.11
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/22/2001	7.06	Product Not Found	0	4.11
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/23/2001	7.07	Product Not Found	0	4.10

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/24/2001	7.08	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/25/2001	7.10	Product Not Found	0	4.07
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/27/2001	7.14	Mix Sheen	0.01	4.03
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/28/2001	7.14	Product Not Found	0	4.03
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/29/2001	7.14	Product Not Found	0	4.03
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/30/2001	7.14	Product Not Found	0	4.03
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/31/2001	7.16	Mix Sheen	0.01	4.01
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/01/2001	7.18	Mix Sheen	0.01	3.99
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/03/2001	7.19	Mix Sheen	0.01	3.98
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/04/2001	7.18	Mix Sheen	0.01	3.99
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/05/2001	7.18	Product Not Found	0	3.99
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/07/2001	7.24	Product Not Found	0	3.93
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/15/2001	7.08	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/05/2001	7.21	Mix Sheen	0.01	3.96
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/06/2001	7.22	Mix Sheen	0.01	3.95
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/08/2001	7.05	Mix Sheen	0.01	4.12
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/09/2001	6.94	Product Not Found	0	4.23
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/10/2001	6.92	Product Not Found	0	4.25
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/11/2001	6.98	Mix Sheen	0.01	4.19
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/12/2001	6.99	Product Not Found	0	4.18
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/13/2001	7.01	Mix Sheen	0.01	4.16
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/15/2001	6.93	Mix Sheen	0.01	4.24
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/16/2001	6.56	Mix Sheen	0.01	4.61
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/17/2001	6.85	Mix Sheen	0.01	4.32
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/18/2001	6.84	Mix Sheen	0.01	4.33
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/19/2001	6.84	Product Not Found	0	4.33
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/20/2001	6.85	Product Not Found	0	4.32
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/22/2001	6.92	Product Not Found	0	4.25
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/23/2001	6.97	Product Not Found	0	4.20
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/24/2001	6.99	Product Not Found	0	4.18
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/25/2001	7.00	Product Not Found	0	4.17
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/26/2001	6.95	Product Not Found	0	4.22
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/27/2001	6.96	Mix Sheen	0.01	4.21
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/29/2001	6.84	Product Not Found	0	4.33
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/30/2001	6.79	Product Not Found	0	4.38
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	10/31/2001	6.76	Product Not Found	0	4.41
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/01/2001	6.73	Product Not Found	0	4.44
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/02/2001	6.75	Product Not Found	0	4.42
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/03/2001	6.76	Product Not Found	0	4.41
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/05/2001	6.69	Product Not Found	0	4.48
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/06/2001	6.61	Product Not Found	0	4.56
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/07/2001	6.53	Product Not Found	0	4.64
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/08/2001	6.51	Product Not Found	0	4.66
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/09/2001	6.49	Product Not Found	0	4.68
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/10/2001	6.46	Product Not Found	0	4.71
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/12/2001	6.39	Product Not Found	0	4.78
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/13/2001	6.35	Product Not Found	0	4.82
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/14/2001	6.34	Product Not Found	0	4.83
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	05/21/2003	10.91	Product Not Found	0	0.26
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/03/2004	11.24	Product Not Found	0	-0.07

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/09/2004	11.38	Product Not Found	0	-0.21
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/13/2004	11.07	Product Not Found	0	0.10
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/17/2004	11.10	Product Not Found	0	0.07
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/20/2004	11.16			0.01
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/23/2004	11.18	Product Not Found	0	-0.01
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/27/2004	11.28	Product Not Found	0	-0.11
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	08/31/2004	11.36	Product Not Found	0	-0.19
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/03/2004	11.35	Product Not Found	0	-0.18
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/07/2004	11.31	Product Not Found	0	-0.14
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/10/2004	11.32	Mix Sheen	0.01	-0.15
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/14/2004	11.40	Product Not Found	0	-0.23
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/21/2004	7.78	Product Not Found	0	3.39
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	09/27/2004	7.60	Product Not Found	0	3.57
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	11/02/2004	6.31	Product Not Found	0	4.86
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	12/03/2004	6.27	Product Not Found	0	4.90
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	9/10/2005	7.48		0	3.69
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	9/18/2006	8.12		0.05	3.05
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	9/10/2007	7.08	DRO	0.03	4.09
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	9/17/2008	6.03	Product Not Found	0	5.14
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	9/3/2009	7.24	Product Not Found	0	3.93
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	9/2/2010	7.58	Product Not Found	0	3.59
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	8/30/2011	7.23	Product Not Found	0	3.94
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	8/31/2012	7.31	Product Not Found	0	3.86
Tanker Shed, UST 42494	E-RWAY	306	04-306	RW	9/3/2013	7.21	Product Not Found	0	3.96
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/12/2001	5.23			6.15
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/14/2001	5.25			6.13
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/17/2001	5.40	Mix Sheen	0.01	5.98
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/18/2001	5.43			5.95
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/19/2001	5.47			5.91
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/21/2001	5.51			5.87
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/22/2001	5.50			5.88
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/23/2001	5.57			5.81
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/24/2001	5.12			6.26
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/25/2001	7.56			3.82
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/28/2001	5.73			5.65
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/29/2001	5.78			5.60
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/30/2001	5.80			5.58
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/31/2001	5.81			5.57
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/01/2001	5.85	Product Not Found	0	5.53
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/02/2001	5.87	Product Not Found	0	5.51
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/04/2001	5.94	Product Not Found	0	5.44
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/08/2001	6.03	Product Not Found	0	5.35
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/09/2001	6.07	Product Not Found	0	5.31
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/11/2001	6.16	Mixed Product	0.05	5.22
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/12/2001	6.12	Mixed Product	0.01	5.26
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/13/2001	6.20	Product Not Found	0	5.18
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/14/2001	6.25	Product Not Found	0	5.13
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/15/2001	6.24	Product Not Found	0	5.14
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/16/2001	6.26	Product Not Found	0	5.12
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/18/2001	5.89	Product Not Found	0	5.49

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/19/2001	6.10	Product Not Found	0	5.28
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/20/2001	6.19	Product Not Found	0	5.19
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/21/2001	5.89	Product Not Found	0	5.49
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/22/2001	5.91	Product Not Found	0	5.47
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/23/2001	5.87	Product Not Found	0	5.51
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/25/2001	6.05	Product Not Found	0	5.33
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/26/2001	6.11	Product Not Found	0	5.27
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/27/2001	5.95	Product Not Found	0	5.43
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/28/2001	6.07	Product Not Found	0	5.31
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/29/2001	6.17	Product Not Found	0	5.21
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	06/30/2001	6.17	Product Not Found	0	5.21
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/02/2001	6.11	Product Not Found	0	5.27
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/03/2001	6.02	Product Not Found	0	5.36
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/04/2001	6.14	Product Not Found	0	5.24
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/05/2001	6.20	Product Not Found	0	5.18
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/06/2001	6.10	Product Not Found	0	5.28
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/07/2001	6.29	Product Not Found	0	5.09
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/09/2001	6.27	Mix Sheen	0.01	5.11
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/10/2001	6.25	Product Not Found	0	5.13
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/11/2001	6.31	Product Not Found	0	5.07
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/12/2001	6.28	Product Not Found	0	5.10
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/13/2001	6.28	Product Not Found	0	5.10
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/14/2001	6.26	Product Not Found	0	5.12
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/16/2001	6.37	Product Not Found	0	5.01
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/17/2001	6.36	Product Not Found	0	5.02
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/18/2001	6.39	Product Not Found	0	4.99
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/19/2001	6.41	Product Not Found	0	4.97
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/20/2001	6.44	Product Not Found	0	4.94
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/21/2001	6.46	Product Not Found	0	4.92
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/23/2001	6.51	Product Not Found	0	4.87
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/24/2001	6.51	Product Not Found	0	4.87
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/25/2001	6.53	Product Not Found	0	4.85
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/26/2001	6.55	Product Not Found	0	4.83
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/27/2001	6.57	Product Not Found	0	4.81
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/28/2001	6.58	Product Not Found	0	4.80
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/30/2001	6.61	Product Not Found	0	4.77
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	07/31/2001	6.63	Product Not Found	0	4.75
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/01/2001	6.65	Product Not Found	0	4.73
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/02/2001	6.67	Product Not Found	0	4.71
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/03/2001	6.59	Product Not Found	0	4.79
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/04/2001	6.63	Product Not Found	0	4.75
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/06/2001	6.50	Product Not Found	0	4.88
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/07/2001	6.48	Product Not Found	0	4.90
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/08/2001	6.50	Product Not Found	0	4.88
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/09/2001	6.60	Product Not Found	0	4.78
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/10/2001	6.66	Product Not Found	0	4.72
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/11/2001	6.67	Product Not Found	0	4.71
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/13/2001	6.72	Product Not Found	0	4.66
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/14/2001	6.74	Product Not Found	0	4.64
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/15/2001	6.77	Product Not Found	0	4.61

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/16/2001	6.77	Product Not Found	0	4.61
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/17/2001	6.80	Product Not Found	0	4.58
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/18/2001	6.83	Product Not Found	0	4.55
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/20/2001	6.68	Product Not Found	0	4.70
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/21/2001	6.78	Product Not Found	0	4.60
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/22/2001	6.69	Product Not Found	0	4.69
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/23/2001	6.79	Product Not Found	0	4.59
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/24/2001	6.82	Product Not Found	0	4.56
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/25/2001	6.81	Product Not Found	0	4.57
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/27/2001	6.85	Mix Sheen	0.01	4.53
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/28/2001	6.82	Product Not Found	0	4.56
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/29/2001	6.86	Mix Sheen	0.01	4.52
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/30/2001	6.85	Product Not Found	0	4.53
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/31/2001	6.89	Mix Sheen	0.01	4.49
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/01/2001	6.93	Product Not Found	0	4.45
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/03/2001	6.85	Product Not Found	0	4.53
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/04/2001	6.93	Product Not Found	0	4.45
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/05/2001	6.92	Product Not Found	0	4.46
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/07/2001	6.98	Product Not Found	0	4.40
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/15/2001	6.74	Product Not Found	0	4.64
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/05/2001	6.74	Mix Sheen	0.01	4.64
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/06/2001	6.92	Product Not Found	0	4.46
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/08/2001	6.68	Mix Sheen	0.01	4.70
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/09/2001	6.68	Product Not Found	0	4.70
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/10/2001	6.97	Product Not Found	0	4.41
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/11/2001	6.70	Mix Sheen	0.01	4.68
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/12/2001	6.11	Product Not Found	0	5.27
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/13/2001	6.67	Mix Sheen	0.01	4.71
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/15/2001	6.62	Product Not Found	0	4.76
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/16/2001	6.60	Product Not Found	0	4.78
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/17/2001	6.61	Product Not Found	0	4.77
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/18/2001	6.50	Product Not Found	0	4.88
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/19/2001	6.59	Product Not Found	0	4.79
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/20/2001	6.58	Product Not Found	0	4.80
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/22/2001	6.61	Product Not Found	0	4.77
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/23/2001	6.72	Product Not Found	0	4.66
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/24/2001	6.77	Product Not Found	0	4.61
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/25/2001	6.75	Product Not Found	0	4.63
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/26/2001	6.58	Product Not Found	0	4.80
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/27/2001	6.70	Product Not Found	0	4.68
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/29/2001	6.50	Product Not Found	0	4.88
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/30/2001	6.47	Product Not Found	0	4.91
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/31/2001	6.41	Product Not Found	0	4.97
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/01/2001	6.48	Product Not Found	0	4.90
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/02/2001	6.48	Product Not Found	0	4.90
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/03/2001	6.49	Product Not Found	0	4.89
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/05/2001	6.33	Product Not Found	0	5.05
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/06/2001	6.30	Product Not Found	0	5.08
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/07/2001	6.20	Product Not Found	0	5.18
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/08/2001	6.25	Product Not Found	0	5.13

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/09/2001	6.21	Product Not Found	0	5.17
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/10/2001	6.26	Product Not Found	0	5.12
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/12/2001	6.04	Product Not Found	0	5.34
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/13/2001	6.07	Product Not Found	0	5.31
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/14/2001	6.04	Product Not Found	0	5.34
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	05/21/2003	10.78	Product Not Found	0	0.60
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/03/2004	11.10	Product Not Found	0	0.28
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/09/2004	11.24	Product Not Found	0	0.14
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/13/2004	11.27	Product Not Found	0	0.11
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/17/2004	7.09	Product Not Found	0	4.29
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/20/2004	7.16			4.22
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/23/2004	7.17	Product Not Found	0	4.21
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/27/2004	7.26	Product Not Found	0	4.12
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	08/31/2004	7.35	Product Not Found	0	4.03
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/03/2004	6.34	Product Not Found	0	5.04
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/07/2004	7.30	Product Not Found	0	4.08
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/10/2004	7.33	Product Not Found	0	4.05
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/14/2004	7.39	Product Not Found	0	3.99
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/21/2004	7.49	Product Not Found	0	3.89
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	09/27/2004	7.31	Mix Sheen	0.01	4.07
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	10/22/2004	6.55	Product Not Found	0	4.83
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	11/02/2004	6.25	Product Not Found	0	5.13
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	12/03/2004	5.86	Product Not Found	0	5.52
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	9/10/2005	7.21		0	4.17
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	9/14/2006	7.76	Product Not Found	0	3.62
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	9/11/2007	6.87	Product Not Found	0	4.51
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	9/17/2008	7.50	Product Not Found	0	3.88
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	9/3/2009	7.07	Product Not Found	0	4.31
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	9/2/2010	7.66	Product Not Found	0	3.72
Tanker Shed, UST 42494	E-RWAY	307	04-307	RW	8/31/2012	7.21	Product Not Found	0	4.17
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	05/14/2001	5.21			6.26
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	05/18/2001	5.37			6.10
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	05/28/2001	5.67			5.80
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	06/01/2001	7.81	Product Not Found	0	3.66
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	06/15/2001	6.20	Product Not Found	0	5.27
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	06/22/2001	5.87	Product Not Found	0	5.60
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	06/29/2001	6.11	Product Not Found	0	5.36
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	07/06/2001	6.18	Product Not Found	0	5.29
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	07/13/2001	5.96	Product Not Found	0	5.51
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	07/20/2001	6.42	Product Not Found	0	5.05
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	07/27/2001	6.52	Product Not Found	0	4.95
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/03/2001	6.61	Product Not Found	0	4.86
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/10/2001	6.65	Product Not Found	0	4.82
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/17/2001	6.79	Product Not Found	0	4.68
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/24/2001	6.77	Product Not Found	0	4.70
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/31/2001	6.89	Product Not Found	0	4.58
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	09/07/2001	6.94	Product Not Found	0	4.53
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	10/05/2001	6.84	Mix Sheen	0.01	4.63
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	10/12/2001	6.71	Product Not Found	0	4.76
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	10/19/2001	6.58	Product Not Found	0	4.89

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	10/26/2001	6.69	Product Not Found	0	4.78
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	11/02/2001	6.48	Product Not Found	0	4.99
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	11/09/2001	6.14	Product Not Found	0	5.33
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	05/21/2003	10.77	Diesel	0.01	0.70
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/03/2004	6.99	Product Not Found	0	4.48
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/09/2004	11.22	Product Not Found	0	0.25
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/13/2004	7.16	Product Not Found	0	4.31
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/17/2004	7.11	Product Not Found	0	4.36
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/20/2004	7.18			4.29
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/23/2004	7.21	Product Not Found	0	4.26
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/27/2004	7.31	Product Not Found	0	4.16
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	08/31/2004	7.39	Product Not Found	0	4.08
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	09/03/2004	7.38	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	09/07/2004	7.34	Mix Sheen	0.01	4.13
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	09/10/2004	7.37	Product Not Found	0	4.10
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	09/14/2004	7.43	Product Not Found	0	4.04
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	09/21/2004	7.53	Product Not Found	0	3.94
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	09/27/2004	7.35	Product Not Found	0	4.12
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	10/22/2004	6.65	Product Not Found	0	4.82
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	11/02/2004	6.30	Product Not Found	0	5.17
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	12/03/2004	6.02	Product Not Found	0	5.45
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	9/10/2005	7.22		0	4.25
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	9/14/2006	7.82	Product Not Found	0	3.65
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	9/11/2007	6.87	Product Not Found	0	4.60
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	9/17/2008	7.55	Product Not Found	0	3.92
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	9/3/2009	7.09	Product Not Found	0	4.38
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	9/2/2010	7.48	Product Not Found	0	3.99
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	8/30/2011	7.14	Product Not Found	0	4.33
Tanker Shed, UST 42494	E-RWAY	308	04-308	RW	8/31/2012	7.25	Product Not Found	0	4.22
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/12/2001	4.99	Mix Sheen	0.01	6.01
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/14/2001	4.99	Mix Sheen	0.01	6.01
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/17/2001	5.01	Mix Sheen	0.01	5.99
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/18/2001	5.20			5.80
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/18/2001	5.17	Mixed Product	0.06	5.83
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/19/2001	5.20	Mixed Product	0.04	5.80
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/21/2001	5.23	Mixed Product	0.01	5.77
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/22/2001	5.27	Mixed Product	0.02	5.73
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/23/2001	5.34	Mixed Product	0.04	5.66
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/24/2001	5.36			5.64
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/25/2001	7.51			3.49
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/28/2001	5.46			5.54
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/29/2001	5.49			5.51
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/30/2001	5.52			5.48
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/31/2001	5.55			5.45
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/01/2001	5.61	Product Not Found	0	5.39
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/02/2001	5.62	Product Not Found	0	5.38
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/04/2001	5.88	Product Not Found	0	5.12
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/08/2001	5.79	Product Not Found	0	5.21
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/09/2001	5.83	Product Not Found	0	5.17
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/11/2001	5.97	Mixed Product	0.01	5.03

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/12/2001	5.90	Mixed Product	0.01	5.10
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/13/2001	5.91	Product Not Found	0	5.09
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/14/2001	5.95	Mixed Product	0.01	5.05
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/15/2001	5.98	Product Not Found	0	5.02
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/16/2001	5.98	Product Not Found	0	5.02
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/18/2001	5.75	Product Not Found	0	5.25
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/19/2001	5.84	Product Not Found	0	5.16
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/20/2001	5.91	Product Not Found	0	5.09
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/21/2001	5.81	Product Not Found	0	5.19
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/22/2001	5.61	Product Not Found	0	5.39
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/23/2001	5.61	Mix Sheen	0.01	5.39
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/25/2001	5.78	Mixed Product	0.01	5.22
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/26/2001	5.82	Mix Sheen	0.01	5.18
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/27/2001	5.80	Mix Sheen	0.01	5.20
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/28/2001	5.81	Product Not Found	0	5.19
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/29/2001	5.86	Product Not Found	0	5.14
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	06/30/2001	5.88	Product Not Found	0	5.12
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/02/2001	5.94	Product Not Found	0	5.06
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/03/2001	5.87	Product Not Found	0	5.13
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/04/2001	5.88	Product Not Found	0	5.12
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/05/2001	5.94	Product Not Found	0	5.06
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/06/2001	5.98	Product Not Found	0	5.02
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/07/2001	5.98	Product Not Found	0	5.02
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/09/2001	6.00	Product Not Found	0	5.00
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/10/2001	6.05	Mixed Product	0.04	4.95
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/11/2001	6.07	Product Not Found	0	4.93
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/12/2001	6.08	Mixed Product	0.06	4.92
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/13/2001	6.18	Product Not Found	0	4.82
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/14/2001	5.97	Product Not Found	0	5.03
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/16/2001	6.02	Mixed Product	0.01	4.98
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/17/2001	6.03	Product Not Found	0	4.97
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/18/2001	6.08	Product Not Found	0	4.92
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/19/2001	6.11	Product Not Found	0	4.89
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/20/2001	6.15	Product Not Found	0	4.85
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/21/2001	6.13	Product Not Found	0	4.87
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/23/2001	6.21	Product Not Found	0	4.79
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/24/2001	6.21	Mix Sheen	0.01	4.79
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/25/2001	6.25	Product Not Found	0	4.75
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/26/2001	6.26	Product Not Found	0	4.74
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/27/2001	6.28	Product Not Found	0	4.72
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/28/2001	6.29	Product Not Found	0	4.71
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/30/2001	6.35	Product Not Found	0	4.65
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	07/31/2001	6.37	Product Not Found	0	4.63
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/01/2001	6.36	Product Not Found	0	4.64
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/02/2001	6.39	Product Not Found	0	4.61
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/03/2001	6.37	Product Not Found	0	4.63
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/04/2001	6.34	Product Not Found	0	4.66
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/06/2001	6.25	Product Not Found	0	4.75
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/07/2001	6.24	Product Not Found	0	4.76
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/08/2001	6.29	Product Not Found	0	4.71

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/09/2001	6.33	Product Not Found	0	4.67
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/10/2001	6.37	Product Not Found	0	4.63
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/11/2001	6.38	Product Not Found	0	4.62
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/13/2001	6.44	Product Not Found	0	4.56
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/14/2001	6.48	Product Not Found	0	4.52
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/15/2001	6.49	Product Not Found	0	4.51
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/16/2001	6.51	Product Not Found	0	4.49
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/17/2001	6.53	Product Not Found	0	4.47
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/18/2001	6.55	Product Not Found	0	4.45
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/20/2001	6.49	Product Not Found	0	4.51
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/21/2001	6.51	Product Not Found	0	4.49
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/22/2001	6.52	Product Not Found	0	4.48
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/23/2001	6.52	Product Not Found	0	4.48
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/24/2001	6.54	Product Not Found	0	4.46
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/25/2001	6.56	Product Not Found	0	4.44
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/27/2001	6.58	Mix Sheen	0.01	4.42
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/28/2001	6.48	Product Not Found	0	4.52
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/29/2001	6.59	Mix Sheen	0.01	4.41
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/30/2001	6.59	Product Not Found	0	4.41
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/31/2001	6.60	Mix Sheen	0.01	4.40
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/01/2001	6.82	Mix Sheen	0.01	4.18
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/03/2001	6.64	Mix Sheen	0.01	4.36
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/04/2001	6.64	Product Not Found	0	4.36
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/05/2001	6.63	Product Not Found	0	4.37
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/07/2001	6.68	Product Not Found	0	4.32
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/15/2001	6.52	Product Not Found	0	4.48
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/05/2001	6.68	Mix Sheen	0.01	4.32
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/06/2001	6.63	Mix Sheen	0.01	4.37
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/08/2001	6.47	Mix Sheen	0.01	4.53
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/09/2001	6.39	Product Not Found	0	4.61
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/10/2001	6.36	Mix Sheen	0.01	4.64
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/11/2001	6.39	Mix Sheen	0.01	4.61
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/12/2001	6.44	Mix Sheen	0.01	4.56
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/13/2001	6.46	Mix Sheen	0.01	4.54
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/15/2001	6.38	Mix Sheen	0.01	4.62
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/16/2001	6.33	Product Not Found	0	4.67
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/17/2001	6.31	Mix Sheen	0.01	4.69
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/18/2001	6.21	Mix Sheen	0.01	4.79
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/19/2001	6.28	Product Not Found	0	4.72
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/20/2001	6.29	Product Not Found	0	4.71
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/22/2001	6.38	Product Not Found	0	4.62
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/23/2001	6.42	Mixed Product	0.01	4.58
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/24/2001	6.45	Product Not Found	0	4.55
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/25/2001	6.48	Mixed Product	0.06	4.52
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/26/2001	6.34	Mix Sheen	0.01	4.66
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/27/2001	6.39	Product Not Found	0	4.61
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/29/2001	6.28	Product Not Found	0	4.72
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/30/2001	6.14	Product Not Found	0	4.86
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/31/2001	6.21	Product Not Found	0	4.79
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/01/2001	6.19	Product Not Found	0	4.81

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/02/2001	6.20	Product Not Found	0	4.80
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/03/2001	6.21	Product Not Found	0	4.79
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/05/2001	6.11	Product Not Found	0	4.89
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/06/2001	6.06	Product Not Found	0	4.94
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/07/2001	5.99	Product Not Found	0	5.01
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/08/2001	5.98	Product Not Found	0	5.02
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/09/2001	5.89	Product Not Found	0	5.11
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/10/2001	5.83	Product Not Found	0	5.17
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/12/2001	5.81	Product Not Found	0	5.19
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/13/2001	5.58	Product Not Found	0	5.42
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/14/2001	5.79	Product Not Found	0	5.21
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	05/21/2003	10.73	Diesel	0.06	0.27
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/03/2004	11.11	Mixed Product	0.15	-0.11
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/09/2004	6.97	Mixed Product	0.13	4.03
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/10/2004	6.90	Mixed Product	0.08	4.10
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/11/2004	7.01	Mixed Product	0.2	3.99
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/11/2004	6.97	Mixed Product	0.16	4.03
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/13/2004	6.88	Mixed Product	0.04	4.12
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/14/2004	7.02	Mixed Product	0.15	3.98
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/15/2004	6.95	Mixed Product	0.15	4.05
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/16/2004	7.01	Mixed Product	0.21	3.99
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/17/2004	6.91	Mixed Product	0.17	4.09
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/18/2004	6.90	Mixed Product	0.19	4.10
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/19/2004	6.98	Mixed Product	0.26	4.02
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/22/2004	6.95	Mixed Product	0.21	4.05
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/23/2004	7.03	Mixed Product	0.18	3.97
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/24/2004	7.01	Mixed Product	0.2	3.99
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/25/2004	6.98	Mixed Product	0.13	4.02
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/26/2004	7.01	Mixed Product	0.14	3.99
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/27/2004	7.06	Mixed Product	0.14	3.94
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/28/2004	7.11	Mixed Product	0.13	3.89
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/29/2004	7.13	Mixed Product	0.11	3.87
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/30/2004	7.13	Mixed Product	0.09	3.87
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	08/31/2004	7.18	Mixed Product	0.15	3.82
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/01/2004	7.13	Mixed Product	0.09	3.87
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/02/2004	7.11	Mixed Product	0.06	3.89
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/03/2004	7.07	Mixed Product	0.05	3.93
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/04/2004	7.06	Mixed Product	0.04	3.94
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/05/2004	7.03	Mixed Product	0.05	3.97
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/06/2004	7.03	Mixed Product	0.06	3.97
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/07/2004	7.06	Mixed Product	0.07	3.94
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/08/2004	7.13	Mixed Product	0.1	3.87
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/09/2004	7.15	Mixed Product	0.08	3.85
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/10/2004	7.08	Mixed Product	0.06	3.92
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/11/2004	7.09	Mixed Product	0.07	3.91
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/12/2004	7.12	Mixed Product	0.08	3.88
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/13/2004	7.16	Mixed Product	0.09	3.84
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/14/2004	7.15	Mixed Product	0.07	3.85
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/15/2004	7.18	Mixed Product	0.08	3.82
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/16/2004	7.21	Mixed Product	0.1	3.79

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/17/2004	7.12	Mix Sheen	0.01	3.88
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/18/2004	7.14	Mix Sheen	0.01	3.86
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/19/2004	7.15	Mix Sheen	0.01	3.85
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/21/2004	7.17	Mix Sheen	0.01	3.83
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/22/2004	7.36	Mixed Product	0.19	3.64
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/23/2004	7.24	Mixed Product	0.14	3.76
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/24/2004	7.17	Mixed Product	0.11	3.83
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/25/2004	7.06	Mixed Product	0.04	3.94
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/26/2004	7.05	Mixed Product	0.06	3.95
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/27/2004	7.08	Mixed Product	0.09	3.92
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/28/2004	6.96	Mixed Product	0.02	4.04
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	09/29/2004	6.88	Mix Sheen	0.01	4.12
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	10/22/2004	6.28	Mixed Product	0.01	4.72
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	11/02/2004	6.23	Product Not Found	0	4.77
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	12/03/2004	5.73	Mixed Product	0.01	5.27
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	9/10/2005	7.30		0.49	3.70
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	9/14/2006	7.23		1.38	3.77
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	9/11/2007	NA	DRO	0.15	NA
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	9/17/2008	7.21	DRO	0.14	3.79
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	9/3/2009	6.77	Product Not Found	0	4.23
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	9/2/2010	7.15	DRO	0.01	3.85
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	8/30/2011	6.82	Product Not Found	0	4.18
Tanker Shed, UST 42494	E-RWAY	309	04-309	RW	8/31/2012	6.92	Product Not Found	0	4.08
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	11/02/2001	6.26	Product Not Found	0	4.92
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	05/21/2003	6.46	Product Not Found	0	4.72
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	08/03/2004	6.77	Product Not Found	0	4.41
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	08/09/2004	6.91	Product Not Found	0	4.27
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	08/13/2004	6.95	Product Not Found	0	4.23
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	08/17/2004	6.87	Product Not Found	0	4.31
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	08/20/2004	6.93			4.25
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	08/23/2004	6.97	Product Not Found	0	4.21
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	08/27/2004	7.15	Product Not Found	0	4.03
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	08/31/2004	7.14	Product Not Found	0	4.04
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	09/03/2004	7.13	Product Not Found	0	4.05
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	09/07/2004	7.10	Mix Sheen	0.01	4.08
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	09/10/2004	7.12	Product Not Found	0	4.06
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	09/14/2004	7.18	Product Not Found	0	4.00
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	09/21/2004	7.28	Product Not Found	0	3.90
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	09/27/2004	7.10	Product Not Found	0	4.08
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	10/22/2004	6.51	Product Not Found	0	4.67
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	11/02/2004	6.26	Product Not Found	0	4.92
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	12/03/2004	5.75	Product Not Found	0	5.43
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	9/10/2005	7.01		0	4.17
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	9/14/2006	7.55	Product Not Found	0	3.63
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	9/11/2007	6.66	Product Not Found	0	4.52
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	9/17/2008	7.28	Product Not Found	0	3.90
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	9/3/2009	6.85	Product Not Found	0	4.33
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	9/3/2010	7.23	Product Not Found	0	3.95
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	8/30/2011	6.90	Product Not Found	0	4.28
Tanker Shed, UST 42494	E-RWAY	310	04-310	RW	8/31/2012	7.02	Product Not Found	0	4.16

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	05/12/2001	4.52			6.41
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	05/31/2001	4.52			6.41
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	05/21/2003	11.15	Product Not Found	0	-0.22
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	08/03/2004	10.92	Mix Sheen	0.01	0.01
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	08/09/2004	11.61	Product Not Found	0	-0.68
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	08/13/2004	6.55	Product Not Found	0	4.38
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	08/17/2004	6.50	Product Not Found	0	4.43
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	08/20/2004	6.58			4.35
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	08/23/2004	6.62	Product Not Found	0	4.31
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	08/27/2004	6.70	Product Not Found	0	4.23
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	08/31/2004	6.76	Product Not Found	0	4.17
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	09/03/2004	6.89	Product Not Found	0	4.04
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	09/07/2004	6.75	Product Not Found	0	4.18
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	09/10/2004	6.77	Product Not Found	0	4.16
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	09/14/2004	6.83	Product Not Found	0	4.10
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	09/21/2004	6.92	Product Not Found	0	4.01
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	09/27/2004	6.76	Product Not Found	0	4.17
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	10/22/2004	5.99	Product Not Found	0	4.94
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	11/02/2004	5.98	Product Not Found	0	4.95
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	12/03/2004	5.38	Product Not Found	0	5.55
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	9/10/2005	6.61		0	4.32
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	9/14/2006	7.15	Product Not Found	0	3.78
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	9/11/2007	6.28	Product Not Found	0	4.65
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	9/17/2008	6.93	DRO	0.01	4.00
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	9/3/2009	6.77	Product Not Found	0	4.16
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	9/2/2010	6.83	Product Not Found	0	4.10
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	8/30/2011	6.53	Product Not Found	0	4.40
Tanker Shed, UST 42494	E-RWAY	311	04-311	RW	8/31/2012	6.64	Product Not Found	0	4.29
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	05/21/2003	6.36	Diesel	0.01	4.85
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	08/03/2004	6.70	Product Not Found	0	4.51
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	08/09/2004	6.81	Product Not Found	0	4.40
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	08/13/2004	6.88	Product Not Found	0	4.33
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	08/17/2004	6.82	Product Not Found	0	4.39
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	08/20/2004	6.87			4.34
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	08/23/2004	6.90	Product Not Found	0	4.31
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	08/27/2004	6.99	Product Not Found	0	4.22
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	08/31/2004	7.07	Product Not Found	0	4.14
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	09/03/2004	7.08	Product Not Found	0	4.13
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	09/07/2004	7.04	Product Not Found	0	4.17
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	09/10/2004	7.05	Mix Sheen	0.01	4.16
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	09/14/2004	7.12	Mix Sheen	0.01	4.09
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	09/21/2004	7.22	Product Not Found	0	3.99
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	09/27/2004	7.05	Product Not Found	0	4.16
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	10/22/2004	6.40	Product Not Found	0	4.81
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	11/02/2004	6.20	Product Not Found	0	5.01
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	12/03/2004	5.68	Product Not Found	0	5.53
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	9/10/2005	6.91		0	4.30
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	9/14/2006	7.49	Product Not Found	0	3.72
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	9/11/2007	6.56	Product Not Found	0	4.65
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	9/17/2008	7.22	Product Not Found	0	3.99

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	9/3/2009	6.76	DRO	0.01	4.45
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	9/2/2010	7.16	Product Not Found	0	4.05
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	8/30/2011	6.81	DRO	0.01	4.40
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	8/31/2012	6.93	Product Not Found	0	4.28
Tanker Shed, UST 42494	E-RWAY	312	04-312	RW	9/3/2013	6.81	Product Not Found	0	4.40
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	11/02/2001	6.23	Product Not Found	0	5.12
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	05/21/2003	6.37	Product Not Found	0	4.98
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	08/03/2004	6.87	Product Not Found	0	4.48
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	08/09/2004	6.85	Product Not Found	0	4.50
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	08/13/2004	6.94	Product Not Found	0	4.41
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	08/17/2004	6.81	Product Not Found	0	4.54
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	08/20/2004	6.91			4.44
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	08/23/2004	6.96	Product Not Found	0	4.39
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	08/27/2004	7.03	Product Not Found	0	4.32
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	08/31/2004	7.11	Product Not Found	0	4.24
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	09/03/2004	7.08	Product Not Found	0	4.27
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	09/07/2004	7.07	Product Not Found	0	4.28
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	09/10/2004	7.08	Mix Sheen	0.01	4.27
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	09/14/2004	7.15	Product Not Found	0	4.20
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	09/21/2004	7.25	Product Not Found	0	4.10
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	09/27/2004	7.09	Product Not Found	0	4.26
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	10/22/2004	6.25	Product Not Found	0	5.10
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	11/02/2004	6.25	Product Not Found	0	5.10
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	12/03/2004	5.64	Product Not Found	0	5.71
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	9/10/2005	6.95		0	4.40
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	9/14/2006	7.60	Product Not Found	0	3.75
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	9/11/2007	6.57	Product Not Found	0	4.78
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	9/17/2008	7.27	Product Not Found	0	4.08
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	9/3/2009	6.80	Product Not Found	0	4.55
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	9/2/2010	7.19	Product Not Found	0	4.16
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	8/30/2011	6.90	DRO	0.01	4.45
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	8/31/2012	6.97	Product Not Found	0	4.38
Tanker Shed, UST 42494	E-RWAY	313	04-313	RW	9/3/2013	6.85	Product Not Found	0	4.50
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	11/02/2001	6.17	Product Not Found	0	5.05
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	05/21/2003	6.35	Product Not Found	0	4.87
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	08/03/2004	6.71	Product Not Found	0	4.51
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	08/09/2004	6.84	Product Not Found	0	4.38
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	08/13/2004	6.86	Product Not Found	0	4.36
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	08/17/2004	6.80	Product Not Found	0	4.42
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	08/20/2004	6.87			4.35
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	08/23/2004	6.90	Product Not Found	0	4.32
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	08/27/2004	6.98	Product Not Found	0	4.24
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	08/31/2004	7.07	Product Not Found	0	4.15
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	09/03/2004	7.18	Product Not Found	0	4.04
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	09/07/2004	7.04	Product Not Found	0	4.18
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	09/10/2004	7.02	Product Not Found	0	4.20
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	09/14/2004	7.13	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	09/21/2004	7.22	Product Not Found	0	4.00
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	09/27/2004	7.02	Product Not Found	0	4.20
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	10/22/2004	6.30	Product Not Found	0	4.92

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	11/02/2004	6.25	Product Not Found	0	4.97
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	12/03/2004	5.59	Product Not Found	0	5.63
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	9/10/2005	6.93		0	4.29
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	9/14/2006	7.47	Product Not Found	0	3.75
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	9/11/2007	6.59	Product Not Found	0	4.63
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	9/17/2008	7.19	Product Not Found	0	4.03
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	9/3/2009	6.75	Product Not Found	0	4.47
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	9/2/2010	7.12	Product Not Found	0	4.10
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	8/30/2011	6.82	Product Not Found	0	4.40
Tanker Shed, UST 42494	E-RWAY	314	04-314	RW	8/31/2012	6.94	Product Not Found	0	4.28
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	11/02/2001	6.45	Product Not Found	0	4.75
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	05/21/2003	6.67	Product Not Found	0	4.53
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	08/03/2004	11.20	Product Not Found	0	0.00
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	08/09/2004	7.11	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	08/13/2004	7.17	Product Not Found	0	4.03
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	08/17/2004	7.04	Product Not Found	0	4.16
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	08/20/2004	7.13			4.07
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	08/23/2004	7.15	Product Not Found	0	4.05
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	08/27/2004	7.25	Product Not Found	0	3.95
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	08/31/2004	7.35	Product Not Found	0	3.85
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	09/03/2004	7.31	Product Not Found	0	3.89
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	09/07/2004	7.28	Product Not Found	0	3.92
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	09/10/2004	7.32	Product Not Found	0	3.88
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	09/14/2004	7.38	Product Not Found	0	3.82
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	09/21/2004	7.48	Product Not Found	0	3.72
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	09/27/2004	7.29	Mix Sheen	0.01	3.91
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	10/22/2004	6.60	Product Not Found	0	4.60
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	11/02/2004	6.54	Product Not Found	0	4.66
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	12/03/2004	5.96	Product Not Found	0	5.24
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	9/10/2005	7.20		0	4.00
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	9/14/2006	7.75	Product Not Found	0	3.45
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	9/11/2007	6.84	Product Not Found	0	4.36
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	9/17/2008	7.47	Product Not Found	0	3.73
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	9/3/2009	7.06	Product Not Found	0	4.14
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	9/2/2010	7.43	Product Not Found	0	3.77
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	8/30/2011	7.11	Product Not Found	0	4.09
Tanker Shed, UST 42494	E-RWAY	317	04-317	MW	8/31/2012	7.20	Product Not Found	0	4.00
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	05/14/2001	9.42			4.30
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	05/18/2001	9.56			4.16
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	05/28/2001	9.78			3.94
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	06/01/2001	9.84	Product Not Found	0	3.88
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	06/15/2001	10.11	Product Not Found	0	3.61
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	06/22/2001	9.53	Product Not Found	0	4.19
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	06/29/2001	9.92	Product Not Found	0	3.80
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	07/06/2001	10.01	Product Not Found	0	3.71
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	07/13/2001	9.94	Product Not Found	0	3.78
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	07/20/2001	10.17	Product Not Found	0	3.55
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	07/27/2001	10.28	Product Not Found	0	3.44
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	08/03/2001	10.20	Product Not Found	0	3.52
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	08/10/2001	10.32	Product Not Found	0	3.40

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	08/17/2001	10.45	Product Not Found	0	3.27
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	08/24/2001	10.43	Product Not Found	0	3.29
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	08/31/2001	10.45	Product Not Found	0	3.27
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	09/07/2001	10.53	Product Not Found	0	3.19
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	10/05/2001	10.42	Product Not Found	0	3.30
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	10/12/2001	10.25	Product Not Found	0	3.47
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	10/19/2001	10.08	Product Not Found	0	3.64
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	10/26/2001	10.24	Product Not Found	0	3.48
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	11/02/2001	9.10	Product Not Found	0	4.62
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	11/02/2001	9.10	Product Not Found	0	4.62
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	11/09/2001	9.89	Product Not Found	0	3.83
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	10/14/2002	10.41	Product Not Found	0	3.31
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	05/21/2003	10.36	Product Not Found	0	3.36
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	09/29/2003	10.47	Product Not Found	0	3.25
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	11/10/2003	10.48	Product Not Found	0	3.24
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	09/13/2004	10.71	Unknown Odor	0	3.01
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	9/10/2005	10.51		0	3.21
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	9/19/2006	11.10	Product Not Found	0	2.62
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	9/10/2007	10.28	Product Not Found	0	3.44
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	9/17/2008	10.83	Product Not Found	0	2.89
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	9/3/2009	10.57	Product Not Found	0	3.15
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	9/2/2010	10.90	Product Not Found	0	2.82
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	8/30/2011	10.62	Product Not Found	0	3.10
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	8/31/2012	10.95	Product Not Found	0	2.77
Tanker Shed, UST 42494	E-RWAY	601	04-601	MW	9/3/2013	10.35	Product Not Found	0	3.37
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	10/08/2001	9.32	Product Not Found	0	2.08
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	11/02/2001	9.32	Product Not Found	0	2.08
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	05/21/2003	9.55	Product Not Found	0	1.85
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	09/30/2003	9.47	Product Not Found	0	1.93
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	11/10/2003	9.55	Product Not Found	0	1.85
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	09/13/2004	9.83	Product Not Found	0	1.57
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	9/10/2005	9.32		0	2.08
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	9/19/2006	10.00	Product Not Found	0	1.40
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	9/10/2007	8.83	Product Not Found	0	2.57
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	9/17/2008	9.78	Product Not Found	0	1.62
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	9/3/2009	9.62	Product Not Found	0	1.78
Tanker Shed, UST 42494	E-RWAY	641	TS-01	MW	9/2/2010	9.90	Product Not Found	0	1.50
Tanker Shed, UST 42494	E-RWAY		TS-02		9/14/2006	NL		NM	NM
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	10/06/2001	6.68	Product Not Found	0	2.93
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	11/02/2001	6.38	Product Not Found	0	3.23
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	05/21/2003	6.65	Product Not Found	0	2.96
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	9/10/2005	6.81		0	2.80
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	9/14/2006	7.41	Product Not Found	0	2.20
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	9/11/2007	6.35	Product Not Found	0	3.26
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW		7.15	Product Not Found	0	2.46
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	9/3/2009	6.86	Product Not Found	0	2.75
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	9/2/2010	7.18	Product Not Found	0	2.43
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	8/30/2011	6.93	Product Not Found	0	2.68
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	8/31/2012	6.67	Product Not Found	0	2.94
Tanker Shed, UST 42494	E-RWAY	643	TS-03	MW	9/3/2013	6.62	Product Not Found	0	2.99

Site Name	Site ID	Loc Abrv ID	Location Cross-Reference	Location Type	Log Date	Corrected Depth to Water (ft)	Product Type	Product Thickness (ft)	GW Surface Elevation (ft)
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	10/06/2001	6.80	Product Not Found	0	3.61
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	11/02/2001	6.43	Product Not Found	0	3.98
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	05/21/2003	6.67	Product Not Found	0	3.74
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	9/10/2005	7.12		0	3.29
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	9/14/2006	7.65		0	2.76
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	9/11/2007	6.73	Product Not Found	0	3.68
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	9/17/2008	7.35	Product Not Found	0	3.06
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	9/3/2009	6.99	Product Not Found	0	3.42
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	9/2/2010	7.36	Product Not Found	0	3.05
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	8/30/2011	7.07	Product Not Found	0	3.34
Tanker Shed, UST 42494	E-RWAY	644	TS-04	MW	8/31/2012	7.11	Product Not Found	0	3.30
Tanker Shed, UST 42494	E-RWAY		TS-05	MW	9/19/2006	9.52		0	1.93
Tanker Shed, UST 42494	E-RWAY		TS-05	MW	9/10/2007	8.45	Product Not Found	0	3.00
Tanker Shed, UST 42494	E-RWAY		TS-05	MW	9/17/2008	9.31	Product Not Found	0	2.14
Tanker Shed, UST 42494	E-RWAY		TS-05	MW	9/3/2009	9.31	Product Not Found	0	2.14
Tanker Shed, UST 42494	E-RWAY		TS-05	MW	9/2/2010	9.40	Product Not Found	0	2.05

Note:
2013 data is highlighted

APPENDIX D-3

2013 LANDFILL SITES FIELD PARAMETERS

Appendix D-3
2013 Landfill Field Sampling Parameters
TO 066 Groundwater Monitoring and Landfill Monitoring Report
Former Naval Complex, Adak, Alaska

Site	Location Cross - Reference	Matrix	Date	Sample Type	Depth-to-Water (ft)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Salinity (ppt)	Temperature (°C)	Methane (ppm)
SWMU 25, Roberts Landfill	A-2	GW	9/9/13	GW	6.46	6.42	0.847	6.3	0.00	-37	0.0	6.04	0.0
	A-3	GW	9/10/13	GW	28.49	4.57	0.302	24.9	3.92	367	0.0	8.84	0.0
	A-5	GW	9/9/13	GW	25.57	5.61	0.582	60.3	0.00	92	0.0	6.82	0.0
	B-1	GW	9/9/13	GW	11.35	4.27	0.458	31.1	0.00	280	0.0	6.81	0.0
	RLSW03	SW	9/9/13	SW	NA	4.84	0.537	17.0	7.88	210	0.0	9.51	NC
	RLSW04	SW	9/9/13	SW	NA	6.21	0.421	5.0	8.44	125	0.0	10.61	NC
	RLSW05	SW	9/9/13	SW	NA	6.14	0.250	0.0	8.21	191	0.0	13.01	NC
	NL-11	SW	9/10/13	SW	NA	6.69	0.384	11	8.71	105	0.0	11.14	NC
	NL-12	SW	9/10/13	SW	NA	6.55	0.501	0	9.11	112	0.0	11.33	NC
	NL-14	SW	9/9/13	SW	NA	7.69	0.849	9	7.29	41	0.0	9.31	NC

Notes:

NC= not collected

GW= groundwater

SW= surface water

APPENDIX E

2013 WELL MAINTENANCE AND REPAIR LIST

TO 66 Adak LTM 2013
2013 Well Maintenance and Repair List
August 26 - September 12, 2013
Report Date: October 1, 2013

Site	Well ID	Damage Description	Recommended Repair
Area 303	MW-303-38	Bollards loose*	No recommended repair to bollards because access is restricted.
	MW-303-39	Bollards loose*	No recommended repair because access is restricted.
Former Power Plant T-1451	MW-1451-1	Bollards loose.	Repair bollards because well is near roadway.
	MW-1451-2	Bollards loose, concrete pad cracked.	Repair bollards because well is near roadway. Repair concrete pad.
	MW-1451-3	Bollards loose*.	No recommended repair because access is restricted.
	MW-1451-4	Bollards loose.	Repair bollards because well is near roadway.
	MW-1451-6	Bollards loose*.	No recommended repair because access is restricted.
	MW-1451-7	Bollards loose*.	No recommended repair because access is restricted.
NMCB Building T-1416 Expanded Area	02-479	Cracked concrete base, loose monument.	Repair concrete base.
SWMU 55, Public Transportation Dept. Waste Storage Area	55-146	One bollard bent over.	Repair bollard.
SWMU 61, Tank Farm B	14-113	Well monument is loose & leaning.	Repair monument.
Tanker Shed, UST 42494	04-301	Cracked concrete monument base.	Repair concrete base.
	04-302	Cracked concrete monument base.	Repair concrete base.
	04-312	Cracked concrete monument base.	Repair concrete base.

Notes: * Although the bollards were not set in concrete and are loose, the wells are not likely to be struck by vehicles due to their location.

APPENDIX F

2013 DATA VALIDATION REPORTS AND LABORATORY ANALYTICAL DATA

Laboratory Data Review Checklist

Completed by:	Mark Gregg, Christina Rink		
Title:	Project Chemist	Date:	Oct 25, 2013
CS Report Name:	30657A	Report Date:	Oct 25, 2013
Consultant Firm:	Laboratory Data Consultants, Inc.		
Laboratory Name:	ALS Environmental	Laboratory Report Number:	K1309677
ADEC File Number:		ADEC RecKey Number:	

1. Laboratory

a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

(●) Yes ( ) No ( ) NA (Please explain.) Comments:

b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

( ) Yes ( ) No (●) NA (Please explain) Comments:

No samples were transferred.

2. Chain of Custody (COC)

a. COC information completed, signed, and dated (including released/received by)?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

b. Correct analyses requested?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt (4° ± 2° C)?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

b. Sample preservation acceptable - acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

◉ Yes ○ No ○ NA (Please explain) Comments:

c. Sample condition documented - broken, leaking (Methanol), zero headspace (VOC vials)?

◉ Yes ○ No ○ NA (Please explain) Comments:

d. If there were any discrepancies, were they documented? - For example, incorrect sample containers/ preservation, sample temperature outside of acceptance range, insufficient or missing samples, etc.?

○ Yes ◉ No ○ NA (Please explain) Comments:

e. Data quality or usability affected? (Please explain)

Comments:

Data is usable.

4. Case Narrative

a. Present and understandable?

◉ Yes ○ No ○ NA (Please explain) Comments:

b. Discrepancies, errors or QC failures identified by the lab?

◉ Yes ○ No ○ NA (Please explain) Comments:

c. Were all corrective actions documented?

○ Yes ○ No ◉ NA (Please explain) Comments:

No corrective actions were necessary.

d. What is the effect on data quality/usability according to the case narrative?

Comments:

Data is usable.

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

b. All applicable holding times met?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

c. All soils reported on a dry weight basis?

( ) Yes ( ) No (●) NA (Please explain) Comments:

All samples are water in this laboratory report.

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

e. Data quality or usability affected? (Please explain)

Comments:

Data is usable.

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

( ) Yes ( ) No ( ) NA (Please explain) Comments:

Yes

ii. All method blank results less than PQL?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

iii. If above PQL, what samples are affected? Comments:

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

○ Yes ○ No ◉ NA (Please explain) Comments:

All method blank results were below the PQL.

v. Data quality or usability affected? (Please explain) Comments:

Data is usable

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics - One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

◉ Yes ○ No ○ NA (Please explain) Comments:

ii. Metals/Inorganics - One LCS and one sample duplicate reported per matrix, analysis and 20 samples?

◉ Yes ○ No ○ NA (Please explain) Comments:

iii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

◉ Yes ○ No ○ NA (Please explain) Comments:

iv. Precision - All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/DMSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

◉ Yes ○ No ○ NA (Please explain) Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

vi. Do the affected samples(s) have data flags? If so, are the data flags clearly defined?

○ Yes ○ No ◉ NA (Please explain) Comments:

No data required qualification.

vii. Data quality or usability affected? (Please explain) Comments:

Data is usable

c. Surrogates - Organics Only

i. Are surrogate recoveries reported for organic analyses - field, QC and laboratory samples?

◉ Yes ○ No ○ NA (Please explain) Comments:

ii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

◉ Yes ○ No ○ NA (Please explain) Comments:

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

○ Yes ○ No ◉ NA (Please explain) Comments:

No surrogates with failed recoveries were reported.

iv. Data quality or usability affected? (Use the comment box to explain.). Comments:

Data is usable

d. Trip Blank - Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

○ Yes ◉ No ○ NA (Please explain.) Comments:

A trip blank was not required to accompany waste characterization samples for this project.

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

○ Yes ○ No ◉ NA (Please explain.) Comments:

No trip blanks were analyzed in this laboratory report.

iii. All results less than PQL?

○ Yes ○ No ◉ NA (Please explain.) Comments:

No trip blanks were analyzed in this laboratory report.

iv. If above PQL, what samples are affected?

Comments:

v. Data quality or usability affected? (Please explain.)

Comments:

NA

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

○ Yes ◉ No ○ NA (Please explain) Comments:

ii. Submitted blind to lab?

○ Yes ○ No ◉ NA (Please explain.) Comments:

No field duplicates were analyzed in this laboratory report.

iii. Precision - All relative percent differences (RPD) less than specified DQOs? (Recommended: 30% water, 50% soil)

$$\text{RPD (\%)} = \text{Absolute Value of: } \frac{(R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

○ Yes ○ No ◉ NA (Please explain) Comments:

No field duplicates were analyzed in this laboratory report.

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

○ Yes ○ No ◉ NA (Please explain) Comments:

No field duplicates were analyzed in this laboratory report.

f. Decontamination or Equipment Blank (if applicable)

○ Yes ○ No ○ NA (Please explain) Comments:

No

i. All results less than PQL?

○ Yes ○ No ◉ NA (Please explain) Comments:

No decontamination or equipment blanks were analyzed in this laboratory report.

ii. If above PQL, what samples are affected?

Comments:

iii. Data quality or usability affected? (Please explain.)

Comments:

NA

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

◉ Yes ○ No ○ NA (Please explain) Comments:

Reset Form

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309677
Project No.:	14005.066.301	**Date Collected:**	09/14/13
Project Name:	TO 66 Adak LTM 2013	**Date Received:**	09/16/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: IDW-PETRO-A-2013 **Lab Code:** K1309677-001

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/18/13	09/24/13	0.545		

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309677
Project No.:	14005.066.301	**Date Collected:**	09/14/13
Project Name:	TO 66 Adak LTM 2013	**Date Received:**	09/16/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: IDW-CERCLA-A-2013 **Lab Code:** K1309677-002

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/18/13	09/24/13	4.5		
Antimony	6020A	0.05	0.05	0.02	1.0	09/18/13	09/24/13	0.09		
Arsenic	6020A	0.50	0.13	0.07	1.0	09/18/13	09/24/13	0.17	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/18/13	09/24/13	0.003	J	
Cadmium	6020A	0.030	0.010	0.003	1.0	09/18/13	09/24/13	0.012	J	
Chromium	6020A	0.20	0.05	0.04	1.0	09/18/13	09/24/13	0.21		
Copper	6020A	0.10	0.05	0.02	1.0	09/18/13	09/24/13	0.81		
Lead	6020A	0.030	0.010	0.005	1.0	09/18/13	09/24/13	0.113		
Mercury	7470A	0.20	0.05	0.02	1.0	09/20/13	09/20/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/18/13	09/24/13	1.40		
Selenium	6020A	1.5	0.5	0.2	1.0	09/18/13	09/24/13	1.3	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/18/13	09/24/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/18/13	09/24/13	0.005	U	
Zinc	6020A	0.80	0.25	0.25	1.0	09/18/13	09/24/13	96.41		

Comments:

TCLP Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309677
Project No.:	14005.066.301	**Date Collected:**	09/14/13
Project Name:	TO 66 Adak LTM 2013	**Date Received:**	09/16/13
Matrix:	TCLP	**Units:**	mg/L
		Basis:	NA

Sample Name: IDW-CERCLA-A-2013 **Lab Code:** K1309677-002

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6010C	0.100	0.075	0.025	5.0	09/17/13	09/20/13	0.075	U	
Barium	6010C	2.000	1.000	0.450	5.0	09/17/13	09/20/13	1.000	U	
Cadmium	6010C	0.100	0.005	0.001	5.0	09/17/13	09/20/13	0.005	U	
Chromium	6010C	0.100	0.025	0.010	5.0	09/17/13	09/20/13	0.025	U	
Lead	6010C	0.10	0.05	0.02	5.0	09/17/13	09/20/13	0.05	U	
Mercury	7470A	0.0010	0.0005	0.0004	1.0	09/17/13	09/18/13	0.0005	U	
Selenium	6010C	0.20	0.05	0.02	5.0	09/17/13	09/20/13	0.05	U	
Silver	6010C	0.100	0.100	0.100	5.0	09/17/13	09/20/13	0.100	U	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309677
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/14/2013
Sample Matrix:	Water	**Date Received:**	09/16/2013

Gasoline Range Organics

Sample Name:	IDW-PETRO-A-2013	**Units:**	ug/L
Lab Code:	K1309677-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**17**	J	100	25	13	1	09/23/13	09/23/13	KWG1310406	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	86	50-150	09/23/13	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309677
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/14/2013
Sample Matrix:	Water	**Date Received:**	09/16/2013

Gasoline Range Organics

Sample Name:	IDW-CERCLA-A-2013	**Units:**	ug/L
Lab Code:	K1309677-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/23/13	09/23/13	KWG1310406	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	84	50-150	09/23/13	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309677
Date Collected: 09/14/2013
Date Received: 09/16/2013

Diesel Range Organics

Sample Name: IDW-PETRO-A-2013
Lab Code: K1309677-001

Units: ug/L
Basis: NA

Extraction Method: EPA 3510C
Analysis Method: AK102

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**630**	Y	48	20	11	1	09/26/13	09/27/13	KWG1310659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	99	50-150	09/27/13	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309677
Date Collected: 09/14/2013
Date Received: 09/16/2013

Diesel Range Organics

Sample Name: IDW-CERCLA-A-2013
Lab Code: K1309677-002

Units: ug/L
Basis: NA

Extraction Method: EPA 3510C
Analysis Method: AK102

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**14**	J	48	20	11	1	09/26/13	09/28/13	KWG1310659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	96	50-150	09/28/13	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309677
Date Collected: 09/14/2013
Date Received: 09/16/2013

Volatile Organic Compounds

Sample Name: IDW-PETRO-A-2013
Lab Code: K1309677-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/27/13	09/27/13	KWG1310610	
Toluene	ND	U	0.50	0.10	0.054	1	09/27/13	09/27/13	KWG1310610	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/27/13	09/27/13	KWG1310610	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/27/13	09/27/13	KWG1310610	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/27/13	09/27/13	KWG1310610	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	70-120	09/27/13	Acceptable
Dibromofluoromethane	91	85-115	09/27/13	Acceptable
Toluene-d8	99	85-120	09/27/13	Acceptable
4-Bromofluorobenzene	92	75-120	09/27/13	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309677
Date Collected: 09/14/2013
Date Received: 09/16/2013
Date Prepared: 09/25/2013

Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction
Volatile Organic Compounds

Sample Name: IDW-CERCLA-A-2013
Lab Code: K1309677-002

Units: mg/L
Basis: NA

Preparation Method: EPA 1311ZHE
Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Regulatory Limit	Dilution Factor	Date Extracted	Date Analyzed	Note
Vinyl Chloride	ND	U	0.080	0.030	0.2	1	10/03/13	10/03/13	
1,1-Dichloroethene	ND	U	0.20	0.032	0.7	1	10/03/13	10/03/13	*
2-Butanone (MEK)	ND	U	8.0	0.76	200	1	10/03/13	10/03/13	
Chloroform	ND	U	0.20	0.029	6	1	10/03/13	10/03/13	
Carbon Tetrachloride	ND	U	0.20	0.039	0.5	1	10/03/13	10/03/13	*
Benzene	ND	U	0.20	0.025	0.5	1	10/03/13	10/03/13	
1,2-Dichloroethane (EDC)	ND	U	0.20	0.032	0.5	1	10/03/13	10/03/13	
Trichloroethene (TCE)	ND	U	0.20	0.040	0.5	1	10/03/13	10/03/13	
Tetrachloroethene (PCE)	ND	U	0.20	0.040	0.7	1	10/03/13	10/03/13	
Chlorobenzene	ND	U	0.20	0.044	100	1	10/03/13	10/03/13	
1,4-Dichlorobenzene	ND	U	0.20	0.048	7.5	1	10/03/13	10/03/13	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Note
Dibromofluoromethane	85	73-122	Acceptable
Toluene-d8	90	65-144	Acceptable
4-Bromofluorobenzene	84	68-117	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309677
Date Collected: 09/14/2013
Date Received: 09/16/2013

Volatile Organic Compounds

Sample Name: IDW-CERCLA-A-2013
Lab Code: K1309677-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	0.50	0.20	0.068	1	09/27/13	09/27/13	KWG1310610	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/27/13	09/27/13	KWG1310610	
Chloroethane	ND	U	0.50	0.20	0.16	1	09/27/13	09/27/13	KWG1310610	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/27/13	09/27/13	KWG1310610	
Acetone	ND	U	20	10	3.3	1	09/27/13	09/27/13	KWG1310610	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	09/27/13	09/27/13	KWG1310610	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	09/27/13	09/27/13	KWG1310610	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/27/13	09/27/13	KWG1310610	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	09/27/13	09/27/13	KWG1310610	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/27/13	09/27/13	KWG1310610	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	09/27/13	09/27/13	KWG1310610	*
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	09/27/13	09/27/13	KWG1310610	*
Benzene	ND	U	0.50	0.10	0.062	1	09/27/13	09/27/13	KWG1310610	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	09/27/13	09/27/13	KWG1310610	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/27/13	09/27/13	KWG1310610	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	09/27/13	09/27/13	KWG1310610	
Toluene	ND	U	0.50	0.10	0.054	1	09/27/13	09/27/13	KWG1310610	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	09/27/13	09/27/13	KWG1310610	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/27/13	09/27/13	KWG1310610	*
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	09/27/13	09/27/13	KWG1310610	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	09/27/13	09/27/13	KWG1310610	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/27/13	09/27/13	KWG1310610	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/27/13	09/27/13	KWG1310610	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/27/13	09/27/13	KWG1310610	
Styrene	ND	U	0.50	0.20	0.089	1	09/27/13	09/27/13	KWG1310610	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	09/27/13	09/27/13	KWG1310610	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/27/13	09/27/13	KWG1310610	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/27/13	09/27/13	KWG1310610	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	09/27/13	09/27/13	KWG1310610	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	09/27/13	09/27/13	KWG1310610	

* See Case Narrative

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309677
Date Collected: 09/14/2013
Date Received: 09/16/2013

Volatile Organic Compounds

Sample Name: IDW-CERCLA-A-2013
Lab Code: K1309677-002

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	91	85-115	09/27/13	Acceptable
1,2-Dichloroethane-d4	95	70-120	09/27/13	Acceptable
Toluene-d8	97	85-120	09/27/13	Acceptable
4-Bromofluorobenzene	91	75-120	09/27/13	Acceptable

Comments:

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 1, 2013

SUBJECT: ADAK LTM 2013, Data Validation

Dear Ms. Wunderlich,

Enclosed are the final validation reports for the fractions listed below with form 1s. These SDGs were received on October 8, 2013. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 30464:

SDG #	Fraction
K1308942 K1308946 K1308948 K1309580	Volatiles, Polynuclear Aromatic Hydrocarbons, Lead, Gasoline Range Organics, Diesel Range Organics, Methane, Wet Chemistry, Dibenz(a,h)anthracene

The data validation was performed under EPA Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2010

Please feel free to contact us if you have any questions.

Sincerely,

Stella Arenas for
Ming-Hwa Hwang
Project Manager/Senior Chemist

L:\Sealaska\Adak\30464COV.wpd

R1 (added B-D)

Attachment 1

Level IV

LDC #30464 (Sealaska-Poulsbo, WA / Adak LTM 2013, TO 66)

Project #14005.066.301

LDC	SDG#	DATE REC'D	(3) DATE DUE	BTEX (8260B)		Benzene (8260B)		PAHs (8270D -SIM)		Pb (6020A)		Diss. Pb (6020A)		GRO (AK101)		DRO (AK102)		Methane (175)		Alk. (2320B)		SO_4 (300.0)																	
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1308942	10/08/13	10/29/13	7	0	3	0	4	2	4	0	4	0	8	0	6	1	9	0	9	0	9	0																
B	K1308946	10/08/13	10/29/13	3	0	2	0	2	0	2	0	2	0	6	0	5	0	9	0	9	0	9	0																
C	K1308948	10/08/13	10/29/13	5	0	-	-	4	0	1	0	1	0	4	0	4	0	8	0	8	0	8	0																
D	K1309580	10/08/13	10/29/13	2	0	-	-	-	-	-	-	-	-	3	0	11	0	-	-	-	-	-	-																
Total	T/MH			17	0	5	0	10	2	7	0	7	0	21	0	26	1	26	0	26	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174

Shaded cells indicate Level IV validation (all other cells are ADEC Checklist validation). These sample counts do not inclute MS/MSD, and DUPs

30464ST.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 26 through August 29, 2013
LDC Report Date:	October 23, 2013
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308942

Sample Identification

TB082613A
NL-08-2013
03-107-2013
03-117-2013
03-012-2013
MRP-MW2-2013
MRP-MW12-2013
MW-303-37-2013
MW-303-39-2013
MW-303-42-2013
NL-08-2013MS
NL-08-2013MSD

Introduction

This data review covers 12 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Volatiles which are Benzene, Toluene, Ethylbenzene and Xylenes (BTEX).

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample TB082613A was identified as a trip blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB082613A	8/26/13	Ethylbenzene m,p-Xylenes	0.050 ug/L 0.17 ug/L	NL-08-2013 03-107-2013 03-117-2013 03-012-2013 MRP-MW2-2013 MRP-MW12-2013 MW-303-37-2013 MW-303-39-2013 MW-303-42-2013

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
NL-08-2013	m,p-Xylenes	0.55 ug/L	0.55U ug/L

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
TB082613A	Dibromofluoromethane	84 (85-115)	All TCL compounds	J (all detects) UJ (all non-detects)	P
MW-303-39-2013	Bromofluorobenzene	72 (75-120)	All TCL compounds	J (all detects) UJ (all non-detects)	P
KWG1309519-3	Dibromofluoromethane	82 (85-115)	All TCL compounds	J (all detects) UJ (all non-detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 03-107-2013 and 03-117-2013 and samples MRP-MW2-2013 and MRP-MW12-2013 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	03-107-2013	03-117-2013	
Benzene	2.8	2.9	4 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	MRP-MW2-2013	MRP-MW12-2013	
Benzene	94	97	3 (≤50)
Toluene	6.1	6.4	5 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	MRP-MW2-2013	MRP-MW12-2013	
Ethylbenzene	310	390	23 (≤50)
m,p-Xylenes	1500	1800	18 (≤50)
o-Xylene	5.0	4.9	2 (≤50)

Adak LTM 2013
Volatiles - Data Qualification Summary - SDG K1308942

SDG	Sample	Compound	Flag	A or P	Reason
K1308942	TB082613A MW-303-39-2013	All TCL compounds	J (all detects) UJ (all non-detects)	P	Surrogate spikes (%R)

Adak LTM 2013
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Field Blank Data Qualification Summary - SDG K1308942

SDG	Sample	Compound	Modified Final Concentration	A or P
K1308942	NL-08-2013	m,p-Xylenes	0.55U ug/L	A

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	TB082613A	**Units:**	ug/L
Lab Code:	K1308942-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	UJ	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309519	
Toluene	ND	U	UJ	0.50	0.10	0.054	1	09/05/13	09/05/13	KWG1309519	
Ethylbenzene	**0.050**	J	J	0.50	0.10	0.050	1	09/05/13	09/05/13	KWG1309519	
m,p-Xylenes	**0.17**	J	J	0.50	0.20	0.11	1	09/05/13	09/05/13	KWG1309519	
o-Xylene	ND	U	UJ	0.50	0.20	0.074	1	09/05/13	09/05/13	KWG1309519	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	103	70-120	09/05/13	Acceptable
Dibromofluoromethane	84	85-115	09/05/13	Outside Control Limits
Toluene-d8	92	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	93	75-120	09/05/13	Acceptable

10/31/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1308942
Date Collected: 08/27/2013
Date Received: 08/30/2013

Volatile Organic Compounds

Sample Name: NL-08-2013
Lab Code: K1308942-006

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.28**	J	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309477	
Toluene	**0.27**	J	0.50	0.10	0.054	1	09/05/13	09/05/13	KWG1309477	
Ethylbenzene	**0.45**	J	0.50	0.10	0.050	1	09/05/13	09/05/13	KWG1309477	
m,p-Xylenes	**0.55**	U	0.50	0.20	0.11	1	09/05/13	09/05/13	KWG1309477	
o-Xylene	**0.12**	J	0.50	0.20	0.074	1	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	70-120	09/05/13	Acceptable
Dibromofluoromethane	96	85-115	09/05/13	Acceptable
Toluene-d8	100	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	92	75-120	09/05/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	03-107-2013	**Units:**	ug/L
Lab Code:	K1308942-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**2.8**	D	2.5	0.50	0.31	5	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	102	70-120	09/05/13	Acceptable
Dibromofluoromethane	94	85-115	09/05/13	Acceptable
Toluene-d8	99	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	92	75-120	09/05/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	03-117-2013	**Units:**	ug/L
Lab Code:	K1308942-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	2.9	D	2.5	0.50	0.31	5	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	102	70-120	09/05/13	Acceptable
Dibromofluoromethane	94	85-115	09/05/13	Acceptable
Toluene-d8	100	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	93	75-120	09/05/13	Acceptable

10/3/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	03-012-2013	**Units:**	ug/L
Lab Code:	K1308942-011	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309477	
Toluene	ND	U	0.50	0.10	0.054	1	09/05/13	09/05/13	KWG1309477	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/05/13	09/05/13	KWG1309477	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/05/13	09/05/13	KWG1309477	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	70-120	09/05/13	Acceptable
Dibromofluoromethane	94	85-115	09/05/13	Acceptable
Toluene-d8	99	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	92	75-120	09/05/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MRP-MW2-2013	**Units:**	ug/L
Lab Code:	K1308942-012	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**94**	D	1.0	0.20	0.13	2	09/05/13	09/05/13	KWG1309477	
Toluene	**6.1**	D	1.0	0.20	0.11	2	09/05/13	09/05/13	KWG1309477	
Ethylbenzene	**310**	D	10	2.0	1.0	20	09/07/13	09/07/13	KWG1309631	
m,p-Xylenes	**1500**	D	10	4.0	2.2	20	09/07/13	09/07/13	KWG1309631	
o-Xylene	**5.0**	D	1.0	0.40	0.15	2	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	70-120	09/05/13	Acceptable
Dibromofluoromethane	92	85-115	09/05/13	Acceptable
Toluene-d8	98	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	91	75-120	09/05/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MRP-MW12-2013	**Units:**	ug/L
Lab Code:	K1308942-013	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**97**	D	1.0	0.20	0.13	2	09/05/13	09/05/13	KWG1309477	
Toluene	**6.4**	D	1.0	0.20	0.11	2	09/05/13	09/05/13	KWG1309477	
Ethylbenzene	**390**	D	10	2.0	1.0	20	09/07/13	09/07/13	KWG1309631	
m,p-Xylenes	**1800**	D	10	4.0	2.2	20	09/07/13	09/07/13	KWG1309631	
o-Xylene	**4.9**	D	1.0	0.40	0.15	2	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	70-120	09/05/13	Acceptable
Dibromofluoromethane	93	85-115	09/05/13	Acceptable
Toluene-d8	99	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	92	75-120	09/05/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MW-303-37-2013	**Units:**	ug/L
Lab Code:	K1308942-014	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.070**	J	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309477	
Toluene	**22**		0.50	0.10	0.054	1	09/05/13	09/05/13	KWG1309477	
Ethylbenzene	**49**		0.50	0.10	0.050	1	09/05/13	09/05/13	KWG1309477	
m,p-Xylenes	**57**		0.50	0.20	0.11	1	09/05/13	09/05/13	KWG1309477	
o-Xylene	**10**		0.50	0.20	0.074	1	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	70-120	09/05/13	Acceptable
Dibromofluoromethane	95	85-115	09/05/13	Acceptable
Toluene-d8	99	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	93	75-120	09/05/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MW-303-39-2013	**Units:**	ug/L
Lab Code:	K1308942-015	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	UJ	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309477	
Toluene	**0.070**	J	J	0.50	0.10	0.054	1	09/05/13	09/05/13	KWG1309477	
Ethylbenzene	**2.6**			0.50	0.10	0.050	1	09/05/13	09/05/13	KWG1309477	
m,p-Xylenes	**2.8**			0.50	0.20	0.11	1	09/05/13	09/05/13	KWG1309477	
o-Xylene	ND	U	UJ	0.50	0.20	0.074	1	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	112	70-120	09/05/13	Acceptable
Dibromofluoromethane	94	85-115	09/05/13	Acceptable
Toluene-d8	101	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	72	75-120	09/05/13	Outside Control Limits

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/29/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MW-303-42-2013	**Units:**	ug/L
Lab Code:	K1308942-016	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.92**		0.50	0.10	0.062	1	09/06/13	09/06/13	KWG1309548	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	70-120	09/06/13	Acceptable
Dibromofluoromethane	100	85-115	09/06/13	Acceptable
Toluene-d8	119	85-120	09/06/13	Acceptable
4-Bromofluorobenzene	86	75-120	09/06/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 26 through August 28, 2013
LDC Report Date:	October 23, 2013
Matrix:	Sediment/Water
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308942

Sample Identification

NL-08S-2013
NL-18S-2013
NL-08-2013
03-012-2013
MW-303-37-2013
MW-303-39-2013

Introduction

This data review covers 2 sediment samples and 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270D using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG1309350-3	9/3/13	2-Methylnaphthalene Acenaphthylene Fluorene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(g,h,i)perylene	0.0026 ug/L 0.0048 ug/L 0.0067 ug/L 0.0048 ug/L 0.0041 ug/L 0.0030 ug/L 0.0030 ug/L 0.0034 ug/L 0.0052 ug/L	All water samples in SDG K1308942

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
NL-08-2013	2-Methylnaphthalene	0.0030 ug/L	0.020U ug/L
03-012-2013	2-Methylnaphthalene	0.0023 ug/L	0.020U ug/L

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG1309350-1/2 (NL-08-2013 03-012-2013 MW-303-37-2013 MW-303-39-2013 KWG1309350-3)	Benzo(a)pyrene	111 (55-110)	-	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples NL-08S-2013 and NL-18S-2013 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)
	NL-08S-2013	NL-18S-2013	
Phenanthrene	2.7	1.5	57 (≤50)

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1308942

SDG	Sample	Compound	Flag	A or P	Reason
K1308942	NL-08-2013 03-012-2013 MW-303-37-2013 MW-303-39-2013	Benzo(a)pyrene	J (all detects)	P	Laboratory control samples (%R)

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1308942

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K1308942	NL-08-2013	2-Methylnaphthalene	0.020U ug/L	A
K1308942	03-012-2013	2-Methylnaphthalene	0.020U ug/L	A

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1308942
Date Collected: 08/27/2013
Date Received: 08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name: NL-08-2013
Lab Code: K1308942-006

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0095**	J	0.020	0.0050	0.0030	1	09/03/13	09/06/13	KWG1309350	
2-Methylnaphthalene	**0.0030**	J	0.020U 0.020	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Acenaphthylene	ND	U	0.020	0.0050	0.0034	1	09/03/13	09/06/13	KWG1309350	
Acenaphthene	ND	U	0.020	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Fluorene	ND	U	0.020	0.0050	0.0038	1	09/03/13	09/06/13	KWG1309350	
Phenanthrene	ND	U	0.020	0.0050	0.0080	1	09/03/13	09/06/13	KWG1309350	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/03/13	09/06/13	KWG1309350	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Pyrene	ND	U	0.020	0.0050	0.0035	1	09/03/13	09/06/13	KWG1309350	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/03/13	09/06/13	KWG1309350	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/03/13	09/06/13	KWG1309350	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/03/13	09/06/13	KWG1309350	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	91	28-98	09/06/13	Acceptable
Fluoranthene-d10	96	31-105	09/06/13	Acceptable
Terphenyl-d14	102	27-112	09/06/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	03-012-2013	**Units:**	ug/L
Lab Code:	K1308942-011	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.075**		0.020	0.0050	0.0030	1	09/03/13	09/06/13	KWG1309350	
2-Methylnaphthalene	**0.0023**	J 0.020U	0.020	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Acenaphthylene	ND	U	0.020	0.0050	0.0034	1	09/03/13	09/06/13	KWG1309350	
Acenaphthene	ND	U	0.020	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Fluorene	ND	U	0.020	0.0050	0.0038	1	09/03/13	09/06/13	KWG1309350	
Phenanthrene	ND	U	0.020	0.0050	0.0080	1	09/03/13	09/06/13	KWG1309350	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/03/13	09/06/13	KWG1309350	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Pyrene	ND	U	0.020	0.0050	0.0035	1	09/03/13	09/06/13	KWG1309350	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/03/13	09/06/13	KWG1309350	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/03/13	09/06/13	KWG1309350	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/03/13	09/06/13	KWG1309350	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	28-98	09/06/13	Acceptable
Fluoranthene-d10	87	31-105	09/06/13	Acceptable
Terphenyl-d14	104	27-112	09/06/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-303-37-2013	**Units:**	ug/L
Lab Code:	K1308942-014	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.3**		0.020	0.0050	0.0030	1	09/03/13	09/06/13	KWG1309350	
2-Methylnaphthalene	**0.65**		0.020	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Acenaphthylene	ND	Ui	0.020	0.0050	0.0050	1	09/03/13	09/06/13	KWG1309350	
Acenaphthene	**0.014**	J	0.020	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Fluorene	**0.034**		0.020	0.0050	0.0038	1	09/03/13	09/06/13	KWG1309350	
Phenanthrene	ND	U	0.020	0.0050	0.0080	1	09/03/13	09/06/13	KWG1309350	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/03/13	09/06/13	KWG1309350	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Pyrene	**0.0084**	JX	0.020	0.0050	0.0035	1	09/03/13	09/06/13	KWG1309350	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/03/13	09/06/13	KWG1309350	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/03/13	09/06/13	KWG1309350	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/03/13	09/06/13	KWG1309350	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	87	28-98	09/06/13	Acceptable
Fluoranthene-d10	92	31-105	09/06/13	Acceptable
Terphenyl-d14	104	27-112	09/06/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-303-39-2013	**Units:**	ug/L
Lab Code:	K1308942-015	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	90	28-98	09/06/13	Acceptable
Fluoranthene-d10	92	31-105	09/06/13	Acceptable
Terphenyl-d14	102	27-112	09/06/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/2013
Sample Matrix:	Soil	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	NL-08S-2013	**Units:**	ug/Kg
Lab Code:	K1308942-003	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Methylnaphthalene	ND	U	3.2	1.0	0.58	1	09/07/13	09/11/13	KWG1309611	
Phenanthrene	2.7	J	3.2	1.0	1.4	1	09/07/13	09/11/13	KWG1309611	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	75	17-104	09/11/13	Acceptable
Fluoranthene-d10	82	27-106	09/11/13	Acceptable
Terphenyl-d14	94	35-109	09/11/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/2013
Sample Matrix:	Soil	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	NL-18S-2013	**Units:**	ug/Kg
Lab Code:	K1308942-004	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Methylnaphthalene	ND	U	3.3	1.0	0.58	1	09/07/13	09/11/13	KWG1309611	
Phenanthrene	**1.5**	J	3.3	1.0	1.4	1	09/07/13	09/11/13	KWG1309611	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	61	17-104	09/11/13	Acceptable
Fluoranthene-d10	71	27-106	09/11/13	Acceptable
Terphenyl-d14	82	35-109	09/11/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2013

Collection Date: August 27 through August 28, 2013

LDC Report Date: October 14, 2013

Matrix: Water

Parameters: Lead

Validation Level: EPA Level IV

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K1308942

Sample Identification

03-107-2013
03-117-2013
MRP-MW2-2013
MW-303-39-2013
03-107-2013F
03-117-2013F
MRP-MW2-2013F
MW-303-39-2013F
03-107-2013MS
03-107-2013MSD

Samples appended with "F" were analyzed as dissolved

Introduction

This data review covers 10 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6020A for Lead.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No Lead was found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Lead	0.007 ug/L	03-107-2013 03-117-2013 MRP-MW2-2013 MW-303-39-2013
ICB/CCB	Lead	0.008 ug/L	03-107-2013F 03-117-2013F MRP-MW2-2013F MW-303-39-2013F

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XII. Sample Result Verification

All sample result verifications were acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples 03-107-2013 and 03-117-2013 and samples 03-107-2013F and 03-117-2013F were identified as field duplicates. No lead was detected in any of the samples with the following exceptions:

Analyte	Concentration (ug/L)		RPD (Limits)
	03-107-2013	03-117-2013	
Lead	14.7	14.2	3 (≤50)

Analyte	Concentration (ug/L)		RPD (Limits)
	03-107-2013F	03-117-2013F	
Lead	14.8	15.2	3 (≤50)

Adak LTM 2013
Lead - Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Lead - Laboratory Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Lead - Field Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308942
Project No.:	14005.066.301	**Date Collected:**	08/27/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: 03-107-2013 **Lab Code:** K1308942-009

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	14.7		

Comments:

14410413

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308942
Project No.:	14005.066.301	**Date Collected:**	08/27/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: 03-107-2013 **Lab Code:** K1308942-009DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	14.8		

Comments:

14H10/4/13

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308942
Project No.:	14005.066.301	**Date Collected:**	08/27/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: 03-117-2013 **Lab Code:** K1308942-010

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	14.2		

Comments:

MM1-1413

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308942
Project No.:	14005.066.301	**Date Collected:**	08/27/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: 03-117-2013 **Lab Code:** K1308942-010DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	15.2		

Comments:

MM 10/4/13

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1308942
Project No.:	14005.066.301	Date Collected:	08/28/13
Project Name:	TO66, Adak LTM 2013	Date Received:	08/30/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: MRP-MW2-2013 Lab Code: K1308942-012

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	1.93		

Comments:

4N10413

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308942
Project No.:	14005.066.301	**Date Collected:**	08/28/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MRP-MW2-2013 **Lab Code:** K1308942-012DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	1.74		

Comments:

14410413

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308942
Project No.:	14005.066.301	**Date Collected:**	08/28/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW-303-39-2013 **Lab Code:** K1308942-015

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	7.03		

Comments:

14410413

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308942
Project No.:	14005.066.301	**Date Collected:**	08/28/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW-303-39-2013 **Lab Code:** K1308942-015DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	8.07		

Comments:

MH 10/4/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2013

Collection Date: August 27 through August 29, 2013

LDC Report Date: October 14, 2013

Matrix: Water

Parameters: Wet Chemistry

Validation Level: EPA Level IV

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K1308942

Sample Identification

MW-1451-1-2013
E-701-2013
03-107-2013
03-117-2013
03-012-2013
MRP-MW2-2013
MW-303-37-2013
MW-303-39-2013
MW-303-42-2013
E-701-2013MS
E-701-2013MSD
E-701-2013DUP
03-012-2013MS
03-012-2013MSD
03-012-2013DUP
MW-303-37-2013MS
MW-303-37-2013MSD
MW-303-37-2013DUP
MW-303-42-2013MS
MW-303-42-2013MSD
MW-303-42-2013DUP

Introduction

This data review covers 21 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Standard Method 2320B for Alkalinity and EPA Method 300.0 for Sulfate.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Continuing Calibration

Continuing calibration frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Concentration	Associated Samples
PB1 (prep blank)	Alkalinity	5.4 mg/L	All samples in SDG K1308948
PB2 (prep blank)	Alkalinity	5.1 mg/L	All samples in SDG K1308948

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
E-701-2013	Alkalinity	25.2 mg/L	25.2U mg/L
03-012-2013	Alkalinity	22.0 mg/L	22.0U mg/L
MW-303-37-2013	Alkalinity	23.5 mg/L	23.5U mg/L

No field blanks were identified in this SDG.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Sample Result Verification

All sample result verifications were acceptable.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

Samples 03-107-2013 and 03-117-2013 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L)		RPD (Limits)
	03-107-2013	03-117-2013	
Alkalinity	48.9	50.0	2 (≤50)

Adak LTM 2013
Wet Chemistry - Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG K1308942

SDG	Sample	Analyte	Modified Final Concentration	A or P
K1308942	E-701-2013	Alkalinity	25.2U mg/L	A
K1308942	03-012-2013	Alkalinity	22.0U mg/L	A
K1308942	MW-303-37-2013	Alkalinity	23.5U mg/L	A

Adak LTM 2013
Wet Chemistry - Field Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/13 - 08/29/13
Sample Matrix:	Water	**Date Received:**	08/30/13
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Sulfate

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
MW-1451-1-2013	K1308942-002	**0.63**	0.20	0.04	0.02	2	08/30/13 15:40	
E-701-2013	K1308942-005	**3.09**	0.20	0.04	0.02	2	08/30/13 14:54	
03-107-2013	K1308942-009	ND U	0.20	0.04	0.02	2	08/30/13 15:55	
03-117-2013	K1308942-010	ND U	0.20	0.04	0.02	2	08/30/13 16:11	
03-012-2013	K1308942-011	**1.92**	0.20	0.04	0.02	2	08/30/13 15:09	
MRP-MW2-2013	K1308942-012	**1.40**	0.20	0.04	0.02	2	08/30/13 16:26	
MW-303-37-2013	K1308942-014	**4.28**	0.20	0.04	0.02	2	08/30/13 16:41	
MW-303-39-2013	K1308942-015	**0.16** J	0.20	0.04	0.02	2	08/30/13 16:57	
MW-303-42-2013	K1308942-016	**2.89**	0.20	0.04	0.02	2	08/30/13 15:24	
Method Blank	K1308942-MB1	ND U	0.10	0.02	0.01	1	08/30/13 08:07	
Method Blank	K1308942-MB2	ND U	0.10	0.02	0.01	1	08/30/13 21:05	

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/13 - 08/29/13
Sample Matrix:	Water	**Date Received:**	08/30/13
Analysis Method:	SM 2320 B	**Units:**	mg/L
		Basis:	NA

Alkalinity as CaCO3, Total

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
MW-1451-1-2013	K1308942-002	139	9.0	6.0	3.0	1	09/05/13 15:54	
E-701-2013	K1308942-005	25.2	9.0	6.0	3.0	1	09/05/13 15:54	
03-107-2013	K1308942-009	48.9	9.0	6.0	3.0	1	09/05/13 15:54	
03-117-2013	K1308942-010	50.0	9.0	6.0	3.0	1	09/05/13 15:54	
03-012-2013	K1308942-011	22.0	9.0	6.0	3.0	1	09/05/13 15:54	
MRP-MW2-2013	K1308942-012	75.6	9.0	6.0	3.0	1	09/05/13 15:54	
MW-303-37-2013	K1308942-014	23.5	9.0	6.0	3.0	1	09/05/13 15:54	
MW-303-39-2013	K1308942-015	65.5	9.0	6.0	3.0	1	09/05/13 15:54	
MW-303-42-2013	K1308942-016	96.6	9.0	6.0	3.0	1	09/05/13 15:54	
Method Blank	K1308942-MB1	5.4 J	9.0	6.0	3.0	1	09/05/13 15:54	
Method Blank	K1308942-MB2	5.1 J	9.0	6.0	3.0	1	09/05/13 15:54	

14410413

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 27 through August 29, 2013
LDC Report Date:	October 23, 2013
Matrix:	Water
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308942

Sample Identification

TB082713A
03-107-2013
03-117-2013
03-012-2013
MRP-MW2-2013
MW-303-37-2013
MW-303-39-2013
MW-303-42-2013
03-012-2013MS
03-012-2013MSD

Introduction

This data review covers 10 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK101 for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 25.0%.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks.

Sample TB082713A was identified as a trip blank. No gasoline range organic contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples 03-107-2013 and 03-117-2013 were identified as field duplicates. No gasoline range organics were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	03-107-2013	03-117-2013	
Gasoline range organics (C6-C10)	6100	5900	3 (≤50)

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	TB082713A	**Units:**	ug/L
Lab Code:	K1308942-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/09/13	09/09/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	99	50-150	09/09/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	03-107-2013	**Units:**	ug/L
Lab Code:	K1308942-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**6100**	Y	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	03-117-2013	**Units:**	ug/L
Lab Code:	K1308942-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**5900**	Y	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	03-012-2013	**Units:**	ug/L
Lab Code:	K1308942-011	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	99	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MRP-MW2-2013	**Units:**	ug/L
Lab Code:	K1308942-012	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**5900**	Y	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	98	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MW-303-37-2013	**Units:**	ug/L
Lab Code:	K1308942-014	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**690**	Y	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	98	50-150	09/10/13	Acceptable

K 10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MW-303-39-2013	**Units:**	ug/L
Lab Code:	K1308942-015	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**1100**	Y	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/29/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MW-303-42-2013	**Units:**	ug/L
Lab Code:	K1308942-016	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**18000**	DY	1000	250	130	10	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	50-150	09/10/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 26 through August 28, 2013
LDC Report Date:	October 23, 2013
Matrix:	Sediment/Water
Parameters:	Diesel Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308942

Sample Identification

MW-1451-1-2013
NL-08S-2013
NL-08-2013
NL-18-2013
03-012-2013
MRP-MW2-2013
MW-303-37-2013

Introduction

This data review covers one sediment sample and 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK102 for Diesel Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than 25.0% .

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples NL-08-2013 and NL-18-2013 were identified as field duplicates. No diesel range organics were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	NL-08-2013	NL-18-2013	
Diesel range organics (C10-C25)	240	220	9 (≤50)

Adak LTM 2013
Diesel Range Organics - Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	MW-1451-1-2013	**Units:**	ug/L
Lab Code:	K1308942-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**5600**	Y	49	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	132	50-150	09/11/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	NL-08-2013	**Units:**	ug/L
Lab Code:	K1308942-006	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**240**	Y	49	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	122	50-150	09/11/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	NL-18-2013	**Units:**	ug/L
Lab Code:	K1308942-007	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**220**	Y	49	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	121	50-150	09/11/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	03-012-2013	**Units:**	ug/L
Lab Code:	K1308942-011	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	16	J	49	20	11	1	09/09/13	09/10/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	109	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	MRP-MW2-2013	**Units:**	ug/L
Lab Code:	K1308942-012	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1300**	L	49	20	11	1	09/09/13	09/10/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	107	50-150	09/10/13	Acceptable

10/21/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	MW-303-37-2013	**Units:**	ug/L
Lab Code:	K1308942-014	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**300**	L	49	20	11	1	09/09/13	09/10/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	106	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308942
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/2013
Sample Matrix:	Soil	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	NL-08S-2013	**Units:**	mg/Kg
Lab Code:	K1308942-003	**Basis:**	Dry
Extraction Method:	EPA 3550B	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**84**	DY	18	8.4	3.4	2	09/04/13	09/07/13	KWG1309447	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	103	50-150	09/07/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2013

Collection Date: August 26 through August 29, 2013

LDC Report Date: October 23, 2013

Matrix: Water

Parameters: Methane

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1308942

Sample Identification

MW-1451-1-2013
E-701-2013
03-107-2013
03-117-2013
03-012-2013
MRP-MW2-2013
MW-303-37-2013
MW-303-39-2013
MW-303-42-2013
E-701-2013MS
E-701-2013MSD
03-012-2013MS
03-012-2013MSD
MW-303-42-2013MS
MW-303-42-2013MSD

Introduction

This data review covers 15 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method RSK-175 for Methane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% .

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No methane was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Not required by the method.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples 03-107-2013 and 03-117-2013 were identified as field duplicates. No methane was detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	03-107-2013	03-117-2013	
Methane	610	650	6 (≤50)

Adak LTM 2013
Methane - Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Methane - Laboratory Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Methane - Field Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Sealaska Environmental Services, LLC**
Client Project ID: **TO66, Adak LTM 2013 / 14005.066.301** ALS Project ID: K1308942

Methane

Test Code: RSK 175
Instrument ID: HP5890A/GC10/FID
Analyst: Wade Henton
Matrix: Water
Test Notes:

Date(s) Collected: 8/26 - 8/29/13
Date Received: 8/30/13
Date Analyzed: 9/6/13

Client Sample ID	ALS Sample ID	Injection Volume ml(s)	Result µg/L	LOQ µg/L	LOD µg/L	MDL µg/L	Data Qualifier
MW-1451-1-2013	K1308942-002	0.10	**2,000**	1.3	0.61	0.30	
E-701-2013	K1308942-005	0.10	0.61	1.3	0.61	0.30	U
03-107-2013	K1308942-009	0.10	**610**	1.3	0.61	0.30	
03-117-2013	K1308942-010	0.10	**650**	1.3	0.61	0.30	
03-012-2013	K1308942-011	0.10	0.61	1.3	0.61	0.30	U
MRP-MW2-2013	K1308942-012	0.10	**1,700**	1.3	0.61	0.30	
MW-303-37-2013	K1308942-014	0.10	**5.8**	1.3	0.61	0.30	
MW-303-39-2013	K1308942-015	0.10	**2,000**	1.3	0.61	0.30	
MW-303-42-2013	K1308942-016	0.10	**52**	1.3	0.61	0.30	
Method Control Sample	P130906-MB	0.10	0.61	1.3	0.61	0.30	U

The Method Control Sample is laboratory water carried through the entire analytical process.
U = Compound was analyzed for, but not detected above the laboratory detection limit.
LOQ = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

10/31/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 27 through August 29, 2013
LDC Report Date:	October 23, 2013
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308946

Sample Identification

TB082713B
MW-303-33-2013
MW-303-32-2013
MW-303-31-2013
MW-303-38-2013

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Volatiles which are Benzene, Toluene, Ethylbenzene and Xylenes (BTEX).

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample TB082713B was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Volatiles - Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Field Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	TB082713B	**Units:**	ug/L
Lab Code:	K1308946-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309477	
Toluene	ND	U	0.50	0.10	0.054	1	09/05/13	09/05/13	KWG1309477	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/05/13	09/05/13	KWG1309477	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/05/13	09/05/13	KWG1309477	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	70-120	09/05/13	Acceptable
Dibromofluoromethane	93	85-115	09/05/13	Acceptable
Toluene-d8	97	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	93	75-120	09/05/13	Acceptable

10/8/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MW-303-33-2013	**Units:**	ug/L
Lab Code:	K1308946-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.10**	J	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	70-120	09/05/13	Acceptable
Dibromofluoromethane	91	85-115	09/05/13	Acceptable
Toluene-d8	98	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	92	75-120	09/05/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MW-303-32-2013	**Units:**	ug/L
Lab Code:	K1308946-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	4.6	D	1.0	0.20	0.13	2	09/07/13	09/07/13	KWG1309631	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	105	70-120	09/07/13	Acceptable
Dibromofluoromethane	105	85-115	09/07/13	Acceptable
Toluene-d8	105	85-120	09/07/13	Acceptable
4-Bromofluorobenzene	103	75-120	09/07/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MW-303-31-2013	**Units:**	ug/L
Lab Code:	K1308946-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.15**	J	0.50	0.10	0.062	1	09/07/13	09/07/13	KWG1309631	
Toluene	ND	U	0.50	0.10	0.054	1	09/07/13	09/07/13	KWG1309631	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/07/13	09/07/13	KWG1309631	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/07/13	09/07/13	KWG1309631	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/07/13	09/07/13	KWG1309631	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	108	70-120	09/07/13	Acceptable
Dibromofluoromethane	103	85-115	09/07/13	Acceptable
Toluene-d8	106	85-120	09/07/13	Acceptable
4-Bromofluorobenzene	99	75-120	09/07/13	Acceptable

10/31/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1308946
Date Collected: 08/29/2013
Date Received: 08/30/2013

Volatile Organic Compounds

Sample Name: MW-303-38-2013
Lab Code: K1308946-010

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**6.0**		0.50	0.10	0.062	1	09/06/13	09/06/13	KWG1309548	
Toluene	**3.8**		0.50	0.10	0.054	1	09/06/13	09/06/13	KWG1309548	
Ethylbenzene	**0.77**		0.50	0.10	0.050	1	09/06/13	09/06/13	KWG1309548	
m,p-Xylenes	**2.5**		0.50	0.20	0.11	1	09/06/13	09/06/13	KWG1309548	
o-Xylene	**0.42**	J	0.50	0.20	0.074	1	09/06/13	09/06/13	KWG1309548	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	102	70-120	09/06/13	Acceptable
Dibromofluoromethane	100	85-115	09/06/13	Acceptable
Toluene-d8	114	85-120	09/06/13	Acceptable
4-Bromofluorobenzene	97	75-120	09/06/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 28 through August 29, 2013
LDC Report Date:	October 23, 2013
Matrix:	Water
Parameters:	Dibenz(a,h)anthracene
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308946

Sample Identification

MW-303-31-2013
MW-303-38-2013

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270D using Selected Ion Monitoring (SIM) for Dibenz(a,h)anthracene.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% .

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No dibenzo(a,h)anthracene was found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG1309350-3	9/3/13	Dibenzo(a,h)anthracene	0.0034 ug/L	All samples in SDG K1308946

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Dibenz(a,h)anthracene - Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Dibenz(a,h)anthracene - Laboratory Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Dibenz(a,h)anthracene - Field Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-303-31-2013	**Units:**	ug/L
Lab Code:	K1308946-009	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	88	28-98	09/06/13	Acceptable
Fluoranthene-d10	95	31-105	09/06/13	Acceptable
Terphenyl-d14	109	27-112	09/06/13	Acceptable

K 10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/29/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-303-38-2013	**Units:**	ug/L
Lab Code:	K1308946-010	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibenz(a,h)anthracene	ND	U	0.021	0.0051	0.0026	1	09/03/13	09/06/13	KWG1309350	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	90	28-98	09/06/13	Acceptable
Fluoranthene-d10	92	31-105	09/06/13	Acceptable
Terphenyl-d14	103	27-112	09/06/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 28 through August 29, 2013
LDC Report Date:	October 14, 2013
Matrix:	Water
Parameters:	Lead
Validation Level:	EPA Level IV
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K1308946

Sample Identification

MW-303-31-2013
MW-303-38-2013
MW-303-31-2013F
MW-303-38-2013F

Samples appended with "F" were analyzed as dissolved

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6020A for Lead.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No Lead was found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Lead	0.008 ug/L	All samples in SDG K1308946

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XII. Sample Result Verification

All sample result verifications were acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Lead - Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Lead - Laboratory Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Lead - Field Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308946
Project No.:	14005.066.301	**Date Collected:**	08/28/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW-303-31-2013 **Lab Code:** K1308946-009

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	3.08		

Comments:

MH 10/4/13

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308946
Project No.:	14005.066.301	**Date Collected:**	08/28/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW-303-31-2013 **Lab Code:** K1308946-009DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	2.97		

Comments:

MM10/4/13

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308946
Project No.:	14005.066.301	**Date Collected:**	08/29/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW-303-38-2013 **Lab Code:** K1308946-010

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	18.3		

Comments:

1441014 13

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308946
Project No.:	14005.066.301	**Date Collected:**	08/29/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW-303-38-2013 **Lab Code:** K1308946-010DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	17.7		

Comments:

MM 10/4/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 26 through August 29, 2013
LDC Report Date:	October 14, 2013
Matrix:	Water
Parameters:	Wet Chemistry
Validation Level:	EPA Level IV
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K1308946

Sample Identification

MW-1451-8-2013
MW-1451-5-2013
01-118-2013
01-150-2013
MW-303-33-2013
MW-303-32-2013
04-211-2013
MW-303-31-2013
MW-303-38-2013
MW-303-38-2013DUP

Introduction

This data review covers 10 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Standard Method 2320B for Alkalinity and EPA Method 300.0 for Sulfate.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Continuing Calibration

Continuing calibration frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Concentration	Associated Samples
PB1 (prep blank)	Alkalinity	5.4 mg/L	All samples in SDG K1308948
PB2 (prep blank)	Alkalinity	5.1 mg/L	All samples in SDG K1308948

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Sample Result Verification

All sample result verifications were acceptable.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Wet Chemistry - Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Wet Chemistry - Field Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/13 - 08/29/13
Sample Matrix:	Water	**Date Received:**	08/30/13
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Sulfate

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
MW-1451-8-2013	K1308946-001	**1.48**	0.20	0.04	0.02	2	08/30/13 22:23	
MW-1451-5-2013	K1308946-002	**0.63**	0.20	0.04	0.02	2	08/30/13 22:38	
01-118-2013	K1308946-003	**0.44**	0.20	0.04	0.02	2	08/30/13 22:54	
01-150-2013	K1308946-004	ND U	0.20	0.04	0.02	2	08/30/13 23:09	
MW-303-33-2013	K1308946-006	**0.15 J**	0.20	0.04	0.02	2	08/31/13 00:14	
MW-303-32-2013	K1308946-007	**1.67**	0.20	0.04	0.02	2	08/31/13 00:29	
04-211-2013	K1308946-008	ND U	0.20	0.04	0.02	2	08/31/13 00:45	
MW-303-31-2013	K1308946-009	**1.28**	0.20	0.04	0.02	2	08/31/13 01:00	
MW-303-38-2013	K1308946-010	**0.86**	0.20	0.04	0.02	2	08/31/13 01:16	
Method Blank	K1308946-MB1	ND U	0.10	0.02	0.01	1	08/30/13 08:07	
Method Blank	K1308946-MB2	ND U	0.10	0.02	0.01	1	08/30/13 21:05	

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/13 - 08/29/13
Sample Matrix:	Water	**Date Received:**	08/30/13
Analysis Method:	SM 2320 B	**Units:**	mg/L
		Basis:	NA

Alkalinity as CaCO3, Total

Sample Name	Lab Code	Result		LOQ	LOD	MDL	Dil.	Date Analyzed	Q
MW-1451-8-2013	K1308946-001	**85.7**		9.0	6.0	3.0	1	09/05/13 15:54	
MW-1451-5-2013	K1308946-002	**45.7**		9.0	6.0	3.0	1	09/05/13 15:54	
01-118-2013	K1308946-003	**188**		9.0	6.0	3.0	1	09/05/13 15:54	
01-150-2013	K1308946-004	**156**		9.0	6.0	3.0	1	09/05/13 15:54	
MW-303-33-2013	K1308946-006	**73.4**		9.0	6.0	3.0	1	09/05/13 15:54	
MW-303-32-2013	K1308946-007	**77.8**		9.0	6.0	3.0	1	09/05/13 15:54	
04-211-2013	K1308946-008	**127**		9.0	6.0	3.0	1	09/05/13 15:54	
MW-303-31-2013	K1308946-009	**54.8**		9.0	6.0	3.0	1	09/05/13 15:54	
MW-303-38-2013	K1308946-010	**36.3**		9.0	6.0	3.0	1	09/05/13 15:54	
Method Blank	K1308946-MB1	**5.4**	J	9.0	6.0	3.0	1	09/05/13 15:54	
Method Blank	K1308946-MB2	**5.1**	J	9.0	6.0	3.0	1	09/05/13 15:54	

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 27 through August 29, 2013
LDC Report Date:	October 23, 2013
Matrix:	Water
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308946

Sample Identification

TB082713B
MW-303-33-2013
MW-303-32-2013
04-211-2013
MW-303-31-2013
MW-303-38-2013

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK101 for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 25.0% .

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound	Concentration	Associated Samples
KWG1310022-5	9/11/13	Gasoline range organics (C6-C10)	14 ug/L	MW-303-38-2013

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

Sample TB082713B was identified as a trip blank. No gasoline range organic contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1308942

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	TB082713B	**Units:**	ug/L
Lab Code:	K1308946-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/09/13	09/09/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	09/09/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MW-303-33-2013	**Units:**	ug/L
Lab Code:	K1308946-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**70**	J	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	98	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MW-303-32-2013	**Units:**	ug/L
Lab Code:	K1308946-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**1900**	Y	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	96	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	04-211-2013	**Units:**	ug/L
Lab Code:	K1308946-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**3000**	Y	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	102	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MW-303-31-2013	**Units:**	ug/L
Lab Code:	K1308946-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**810**	Y	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	50-150	09/10/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/29/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MW-303-38-2013	**Units:**	ug/L
Lab Code:	K1308946-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**4400**	Y	100	25	13	1	09/11/13	09/11/13	KWG1310022	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	09/11/13	Acceptable

10/31/13

Comments:

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 26 through August 28, 2013
LDC Report Date:	October 23, 2013
Matrix:	Water
Parameters:	Diesel Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308946

Sample Identification

MW-1451-8-2013
MW-1451-5-2013
01-118-2013
01-150-2013
MW-303-32-2013

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK102 for Diesel Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than 25.0% .

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Diesel Range Organics - Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	MW-1451-8-2013	**Units:**	ug/L
Lab Code:	K1308946-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**2600**	Y	49	20	11	1	09/09/13	09/10/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	115	50-150	09/10/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	MW-1451-5-2013	**Units:**	ug/L
Lab Code:	K1308946-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**3700**	Y	49	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	121	50-150	09/11/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	01-118-2013	**Units:**	ug/L
Lab Code:	K1308946-003	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**12000**	Y	50	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	120	50-150	09/11/13	Acceptable

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Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	01-150-2013	**Units:**	ug/L
Lab Code:	K1308946-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1400**	Y	49	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	106	50-150	09/11/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308946
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	MW-303-32-2013	**Units:**	ug/L
Lab Code:	K1308946-007	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**2100**	L	50	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	99	50-150	09/11/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2013

Collection Date: August 26 through August 29, 2013

LDC Report Date: October 23, 2013

Matrix: Water

Parameters: Methane

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1308946

Sample Identification

MW-1451-8-2013
MW-1451-5-2013
01-118-2013
01-150-2013
MW-303-33-2013
MW-303-32-2013
04-211-2013
MW-303-31-2013
MW-303-38-2013

Introduction

This data review covers 9 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method RSK-175 for Methane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% .

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No methane was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Not required by the method.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Methane - Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Methane - Laboratory Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Methane - Field Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Sealaska Environmental Services, LLC**
Client Project ID: **TO66, Adak LTM 2013 / 14005.066.301** ALS Project ID: K1308946

Methane

Test Code: RSK 175
Instrument ID: HP5890A/GC10/FID
Analyst: Jennifer Young
Matrix: Water
Test Notes:

Date(s) Collected: 8/26 - 8/29/13
Date Received: 8/30/13
Date Analyzed: 9/7/13

Client Sample ID	ALS Sample ID	Injection Volume ml(s)	Result µg/L	LOQ µg/L	LOD µg/L	MDL µg/L	Data Qualifier
MW-1451-8-2013	K1308946-001	0.10	**1,500**	1.3	0.61	0.30	
MW-1451-5-2013	K1308946-002	0.10	**510**	1.3	0.61	0.30	
01-118-2013	K1308946-003	0.10	**4,800**	1.3	0.61	0.30	
01-150-2013	K1308946-004	0.10	**13,000**	1.3	0.61	0.30	
MW-303-33-2013	K1308946-006	0.10	**7,500**	1.3	0.61	0.30	
MW-303-32-2013	K1308946-007	0.10	**4,900**	1.3	0.61	0.30	
04-211-2013	K1308946-008	0.10	**4,700**	1.3	0.61	0.30	
MW-303-31-2013	K1308946-009	0.10	**380**	1.3	0.61	0.30	
MW-303-38-2013	K1308946-010	0.10	**180**	1.3	0.61	0.30	
Method Control Sample	P130907-MB	0.10	0.61	1.3	0.61	0.30	**U**

The Method Control Sample is laboratory water carried through the entire analytical process.
U = Compound was analyzed for, but not detected above the laboratory detection limit.
LOQ = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

10/31/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	July 26 through July 29, 2013
LDC Report Date:	October 28, 2013
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308948

Sample Identification

MW-1451-2-2013
TB082613C
MW-1451-3-2013
MW-1451-4-2013
MW-303-40-2013

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Volatiles which are Benzene, Toluene, Ethylbenzene and Xylenes (BTEX).

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample TB082613C was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
TB082613C	Dibromofluoromethane	83 (85-115)	All TCL compounds	J (all detects) UJ (all non-detects)	P
MW-1451-3-2013	Dibromofluoromethane	80 (85-115)	All TCL compounds	J (all detects) UJ (all non-detects)	P
MW-1451-4-2013	Dibromofluoromethane	81 (85-115)	All TCL compounds	J (all detects) UJ (all non-detects)	P
KWG1309519-3	Dibromofluoromethane	82 (85-115)	All TCL compounds	J (all detects) UJ (all non-detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Volatiles - Data Qualification Summary - SDG K1308948

SDG	Sample	Compound	Flag	A or P	Reason
K1308948	TB082613C MW-1451-3-2013 MW-1451-4-2013	All TCL compounds	J (all detects) UJ (all non-detects)	P	Surrogate spikes (%R)

Adak LTM 2013
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Field Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MW-1451-2-2013	**Units:**	ug/L
Lab Code:	K1308948-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.23**	J	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309477	
Toluene	**0.19**	J	0.50	0.10	0.054	1	09/05/13	09/05/13	KWG1309477	
Ethylbenzene	**2.5**		0.50	0.10	0.050	1	09/05/13	09/05/13	KWG1309477	
m,p-Xylenes	**3.0**		0.50	0.20	0.11	1	09/05/13	09/05/13	KWG1309477	
o-Xylene	**0.63**		0.50	0.20	0.074	1	09/05/13	09/05/13	KWG1309477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	70-120	09/05/13	Acceptable
Dibromofluoromethane	92	85-115	09/05/13	Acceptable
Toluene-d8	98	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	89	75-120	09/05/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/26/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	TB082613C	**Units:**	ug/L
Lab Code:	K1308948-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309519	
Toluene	ND	U	0.50	0.10	0.054	1	09/05/13	09/05/13	KWG1309519	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/05/13	09/05/13	KWG1309519	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/05/13	09/05/13	KWG1309519	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/05/13	09/05/13	KWG1309519	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	70-120	09/05/13	Acceptable
Dibromofluoromethane	83	85-115	09/05/13	Outside Control Limits
Toluene-d8	92	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	90	75-120	09/05/13	Acceptable

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Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MW-1451-3-2013	**Units:**	ug/L
Lab Code:	K1308948-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	UJ	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309519	
Toluene	ND	U		0.50	0.10	0.054	1	09/05/13	09/05/13	KWG1309519	
Ethylbenzene	ND	U		0.50	0.10	0.050	1	09/05/13	09/05/13	KWG1309519	
m,p-Xylenes	ND	U		0.50	0.20	0.11	1	09/05/13	09/05/13	KWG1309519	
o-Xylene	ND	U		0.50	0.20	0.074	1	09/05/13	09/05/13	KWG1309519	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	70-120	09/05/13	Acceptable
Dibromofluoromethane	80	85-115	09/05/13	Outside Control Limits
Toluene-d8	90	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	90	75-120	09/05/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MW-1451-4-2013	**Units:**	ug/L
Lab Code:	K1308948-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/05/13	09/05/13	KWG1309519	
Toluene	ND	U	0.50	0.10	0.054	1	09/05/13	09/05/13	KWG1309519	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/05/13	09/05/13	KWG1309519	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/05/13	09/05/13	KWG1309519	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/05/13	09/05/13	KWG1309519	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	70-120	09/05/13	Acceptable
Dibromofluoromethane	81	85-115	09/05/13	Outside Control Limits
Toluene-d8	91	85-120	09/05/13	Acceptable
4-Bromofluorobenzene	90	75-120	09/05/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/29/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Volatile Organic Compounds

Sample Name:	MW-303-40-2013	**Units:**	ug/L
Lab Code:	K1308948-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/06/13	09/06/13	KWG1309548	
Toluene	**0.060**	J	0.50	0.10	0.054	1	09/06/13	09/06/13	KWG1309548	
Ethylbenzene	**1.5**		0.50	0.10	0.050	1	09/06/13	09/06/13	KWG1309548	
m,p-Xylenes	**1.6**		0.50	0.20	0.11	1	09/06/13	09/06/13	KWG1309548	
o-Xylene	**0.16**	J	0.50	0.20	0.074	1	09/06/13	09/06/13	KWG1309548	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	70-120	09/06/13	Acceptable
Dibromofluoromethane	99	85-115	09/06/13	Acceptable
Toluene-d8	106	85-120	09/06/13	Acceptable
4-Bromofluorobenzene	102	75-120	09/06/13	Acceptable

10/21/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 27 through August 29, 2013
LDC Report Date:	October 28, 2013
Matrix:	Water
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308948

Sample Identification

MW-1451-2-2013
MW-1451-3-2013
MW-1451-4-2013
MW-303-40-2013

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270D using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% .

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbons were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG1309350-3	9/3/13	2-Methylnaphthalene Acenaphthylene Fluorene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	0.0026 ug/L 0.0048 ug/L 0.0067 ug/L 0.0048 ug/L 0.0041 ug/L 0.0030 ug/L 0.0030 ug/L 0.0034 ug/L 0.0052 ug/L	All samples in SDG K1308948

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
MW-1451-4-2013	2-Methylnaphthalene Fluorene	0.0027 ug/L 0.0065 ug/L	0.019U ug/L 0.019U ug/L

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG13093501/2 (MW-1451-2-2013 MW-1451-3-2013 MW-1451-4-2013 KWG1309350-3)	Benzo(a)pyrene	111 (55-110)	-	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1308948

SDG	Sample	Compound	Flag	A or P	Reason
K1308948	MW-1451-2-2013 MW-1451-3-2013 MW-1451-4-2013	Benzo(a)pyrene	J (all detects)	P	Laboratory control samples (%R)

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1308948

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K1308948	MW-1451-4-2013	2-Methylnaphthalene Fluorene	0.019U ug/L 0.019U ug/L	A

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-1451-2-2013	**Units:**	ug/L
Lab Code:	K1308948-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**7.2**		0.019	0.0050	0.0030	1	09/03/13	09/06/13	KWG1309350	
2-Methylnaphthalene	**1.2**		0.019	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Acenaphthylene	ND	Ui	0.21	0.21	0.21	5	09/03/13	09/09/13	KWG1309350	
Acenaphthene	**1.3**	D	0.095	0.025	0.022	5	09/03/13	09/09/13	KWG1309350	
Fluorene	**4.9**	D	0.095	0.025	0.019	5	09/03/13	09/09/13	KWG1309350	
Phenanthrene	**0.25**		0.019	0.0050	0.0080	1	09/03/13	09/06/13	KWG1309350	
Anthracene	ND	U	0.019	0.0050	0.0036	1	09/03/13	09/06/13	KWG1309350	
Fluoranthene	**0.020**	X	0.019	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Pyrene	**0.029**	X	0.019	0.0050	0.0035	1	09/03/13	09/06/13	KWG1309350	
Benz(a)anthracene	ND	U	0.019	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Chrysene	ND	U	0.019	0.0050	0.0034	1	09/03/13	09/06/13	KWG1309350	
Benzo(b)fluoranthene	ND	U	0.019	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Benzo(k)fluoranthene	ND	U	0.019	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(a)pyrene	ND	U	0.019	0.0050	0.0043	1	09/03/13	09/06/13	KWG1309350	
Indeno(1,2,3-cd)pyrene	ND	U	0.019	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Dibenz(a,h)anthracene	ND	U	0.019	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(g,h,i)perylene	ND	U	0.019	0.0050	0.0029	1	09/03/13	09/06/13	KWG1309350	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	111	28-98	09/09/13	Outside Control Limits
Fluoranthene-d10	93	31-105	09/06/13	Acceptable
Terphenyl-d14	100	27-112	09/06/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-1451-3-2013	**Units:**	ug/L
Lab Code:	K1308948-005	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.026**	X	0.019	0.0050	0.0030	1	09/03/13	09/06/13	KWG1309350	
2-Methylnaphthalene	ND	Ui	0.019	0.0058	0.0058	1	09/03/13	09/06/13	KWG1309350	
Acenaphthylene	ND	Ui	0.019	0.0050	0.0050	1	09/03/13	09/06/13	KWG1309350	
Acenaphthene	ND	U	0.019	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Fluorene	ND	Ui	0.019	0.0060	0.0060	1	09/03/13	09/06/13	KWG1309350	
Phenanthrene	ND	U	0.019	0.0050	0.0080	1	09/03/13	09/06/13	KWG1309350	
Anthracene	ND	U	0.019	0.0050	0.0036	1	09/03/13	09/06/13	KWG1309350	
Fluoranthene	ND	U	0.019	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Pyrene	ND	U	0.019	0.0050	0.0035	1	09/03/13	09/06/13	KWG1309350	
Benz(a)anthracene	ND	U	0.019	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Chrysene	ND	U	0.019	0.0050	0.0034	1	09/03/13	09/06/13	KWG1309350	
Benzo(b)fluoranthene	ND	U	0.019	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Benzo(k)fluoranthene	ND	U	0.019	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(a)pyrene	ND	U	0.019	0.0050	0.0043	1	09/03/13	09/06/13	KWG1309350	
Indeno(1,2,3-cd)pyrene	ND	U	0.019	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Dibenz(a,h)anthracene	ND	U	0.019	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(g,h,i)perylene	ND	U	0.019	0.0050	0.0029	1	09/03/13	09/06/13	KWG1309350	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	85	28-98	09/06/13	Acceptable
Fluoranthene-d10	96	31-105	09/06/13	Acceptable
Terphenyl-d14	106	27-112	09/06/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-1451-4-2013	**Units:**	ug/L
Lab Code:	K1308948-006	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.047**		0.019	0.0050	0.0030	1	09/03/13	09/06/13	KWG1309350	
2-Methylnaphthalene	**0.0027**	J 0.019U	0.019	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Acenaphthylene	ND	U	0.019	0.0050	0.0034	1	09/03/13	09/06/13	KWG1309350	
Acenaphthene	ND	U	0.019	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Fluorene	**0.0065**	J 0.019U	0.019	0.0050	0.0038	1	09/03/13	09/06/13	KWG1309350	
Phenanthrene	ND	U	0.019	0.0050	0.0080	1	09/03/13	09/06/13	KWG1309350	
Anthracene	ND	U	0.019	0.0050	0.0036	1	09/03/13	09/06/13	KWG1309350	
Fluoranthene	ND	U	0.019	0.0050	0.0044	1	09/03/13	09/06/13	KWG1309350	
Pyrene	ND	U	0.019	0.0050	0.0035	1	09/03/13	09/06/13	KWG1309350	
Benz(a)anthracene	ND	U	0.019	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Chrysene	ND	U	0.019	0.0050	0.0034	1	09/03/13	09/06/13	KWG1309350	
Benzo(b)fluoranthene	ND	U	0.019	0.0050	0.0023	1	09/03/13	09/06/13	KWG1309350	
Benzo(k)fluoranthene	ND	U	0.019	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(a)pyrene	ND	U	0.019	0.0050	0.0043	1	09/03/13	09/06/13	KWG1309350	
Indeno(1,2,3-cd)pyrene	ND	U	0.019	0.0050	0.0026	1	09/03/13	09/06/13	KWG1309350	
Dibenz(a,h)anthracene	ND	U	0.019	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	
Benzo(g,h,i)perylene	ND	U	0.019	0.0050	0.0029	1	09/03/13	09/06/13	KWG1309350	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	89	28-98	09/06/13	Acceptable
Fluoranthene-d10	92	31-105	09/06/13	Acceptable
Terphenyl-d14	106	27-112	09/06/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/29/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	MW-303-40-2013	**Units:**	ug/L
Lab Code:	K1308948-009	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/03/13	09/06/13	KWG1309350	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	83	28-98	09/06/13	Acceptable
Fluoranthene-d10	87	31-105	09/06/13	Acceptable
Terphenyl-d14	99	27-112	09/06/13	Acceptable

10/21/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 29, 2013
LDC Report Date:	October 14, 2013
Matrix:	Water
Parameters:	Lead
Validation Level:	EPA Level IV
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K1308948

Sample Identification

MW-303-40-2013
MW-303-40-2013F

Samples appended with "F" were analyzed as dissolved

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6020A for Lead.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No Lead was found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Lead	0.008 ug/L	All samples in SDG K1308948

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XII. Sample Result Verification

All sample result verifications were acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Lead - Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

Adak LTM 2013
Lead - Laboratory Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

Adak LTM 2013
Lead - Field Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308948
Project No.:	14005.066.301	**Date Collected:**	08/29/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW-303-40-2013 **Lab Code:** K1308948-009DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	2.43		

Comments:

4/4/0/4/13

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1308948
Project No.:	14005.066.301	**Date Collected:**	08/29/13
Project Name:	TO66, Adak LTM 2013	**Date Received:**	08/30/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW-303-40-2013 **Lab Code:** K1308948-009

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/03/13	09/04/13	2.40		

Comments:

4410413

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 27 through August 29, 2013
LDC Report Date:	October 14, 2013
Matrix:	Water
Parameters:	Wet Chemistry
Validation Level:	EPA Level IV
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K1308948

Sample Identification

MW-1451-6-2013
MW-1451-2-2013
MW-1451-12-2013
MW-1451-3-2013
MW-1451-4-2013
MW-303-43-2013
MW-303-44-2013
MW-303-40-2013
MW-1451-2-2013MS
MW-1451-2-2013MSD
MW-1451-2-2013DUP

Introduction

This data review covers 11 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Standard Method 2320B for Alkalinity and EPA Method 300.0 for Sulfate.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Continuing Calibration

Continuing calibration frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Concentration	Associated Samples
PB1 (prep blank)	Alkalinity	5.4 mg/L	All samples in SDG K1308948
PB2 (prep blank)	Alkalinity	5.1 mg/L	All samples in SDG K1308948
ICB/CCB	Sulfate	0.06 mg/L	MW-1451-4-2013 MW-303-43-2013 MW-303-44-2013 MW-303-40-2013

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Sample Result Verification

All sample result verifications were acceptable.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

Samples MW-1451-2-2013 and MW-1451-12-2013 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L)		RPD (Limits)
	MW-1451-2-2013	MW-1451-12-2013	
Sulfate	69.6	64.0	8 (≤50)
Alkalinity	121	116	4 (≤50)

Adak LTM 2013
Wet Chemistry - Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

Adak LTM 2013
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

Adak LTM 2013
Wet Chemistry - Field Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/13 - 08/29/13
Sample Matrix:	Water	**Date Received:**	08/30/13
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Sulfate

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
MW-1451-6-2013	K1308948-001	**0.10 J**	0.20	0.04	0.02	2	08/31/13 01:31	
MW-1451-2-2013	K1308948-002	**69.6**	2.0	0.4	0.2	20	08/31/13 10:54	
MW-1451-12-2013	K1308948-003	**64.0**	2.0	0.4	0.2	20	08/31/13 11:09	
MW-1451-3-2013	K1308948-005	**33.0**	2.0	0.4	0.2	20	08/31/13 11:25	
MW-1451-4-2013	K1308948-006	**10.4**	0.20	0.04	0.02	2	08/31/13 03:19	
MW-303-43-2013	K1308948-007	**6.02**	0.20	0.04	0.02	2	08/31/13 03:34	
MW-303-44-2013	K1308948-008	**6.69**	0.20	0.04	0.02	2	08/31/13 03:50	
MW-303-40-2013	K1308948-009	**3.75**	0.20	0.04	0.02	2	08/31/13 04:05	
Method Blank	K1308948-MB1	ND U	0.10	0.02	0.01	1	08/30/13 08:07	
Method Blank	K1308948-MB2	ND U	0.10	0.02	0.01	1	08/30/13 21:05	
Method Blank	K1308948-MB3	ND U	0.10	0.02	0.01	1	08/31/13 08:07	

MM 10/4/13

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/13 - 08/29/13
Sample Matrix:	Water	**Date Received:**	08/30/13
Analysis Method:	SM 2320 B	**Units:**	mg/L
		Basis:	NA

Alkalinity as CaCO3, Total

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
MW-1451-6-2013	K1308948-001	**60.9**	9.0	6.0	3.0	1	09/05/13 15:54	
MW-1451-2-2013	K1308948-002	**121**	9.0	6.0	3.0	1	09/05/13 15:54	
MW-1451-12-2013	K1308948-003	**116**	9.0	6.0	3.0	1	09/05/13 15:54	
MW-1451-3-2013	K1308948-005	**130**	9.0	6.0	3.0	1	09/05/13 15:54	
MW-1451-4-2013	K1308948-006	**51.3**	9.0	6.0	3.0	1	09/05/13 15:54	
MW-303-43-2013	K1308948-007	**46.1**	9.0	6.0	3.0	1	09/05/13 15:54	
MW-303-44-2013	K1308948-008	**60.4**	9.0	6.0	3.0	1	09/05/13 15:54	
MW-303-40-2013	K1308948-009	**49.3**	9.0	6.0	3.0	1	09/05/13 15:54	
Method Blank	K1308948-MB1	**5.4 J**	9.0	6.0	3.0	1	09/05/13 15:54	
Method Blank	K1308948-MB2	**5.1 J**	9.0	6.0	3.0	1	09/05/13 15:54	

Lyl 10/4/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 27 through August 29, 2013
LDC Report Date:	October 28, 2013
Matrix:	Water
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308948

Sample Identification

MW-303-43-2013
MW-303-44-2013
MW-303-40-2013
TB082713C

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK101 for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 25.0%.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound	Concentration	Associated Samples
KWG1310022-5	9/11/13	Gasoline range organics (C6-C10)	14 ug/L	MW-303-44-2013 MW-303-40-2013

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

Sample TB082713C was identified as a trip blank. No gasoline range organic contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MW-303-43-2013	**Units:**	ug/L
Lab Code:	K1308948-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**3500**	Y	100	25	13	1	09/10/13	09/10/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	09/10/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/29/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MW-303-44-2013	**Units:**	ug/L
Lab Code:	K1308948-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**3800**	Y	100	25	13	1	09/11/13	09/11/13	KWG1310022	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	50-150	09/11/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/29/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	MW-303-40-2013	**Units:**	ug/L
Lab Code:	K1308948-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**550**	Y	100	25	13	1	09/11/13	09/11/13	KWG1310022	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	50-150	09/11/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Gasoline Range Organics

Sample Name:	TB082713C	**Units:**	ug/L
Lab Code:	K1308948-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/09/13	09/09/13	KWG1309880	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	09/09/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 27 through August 28, 2013
LDC Report Date:	October 28, 2013
Matrix:	Water
Parameters:	Diesel Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308948

Sample Identification

MW-1451-6-2013
MW-1451-2-2013
MW-1451-3-2013
MW-1451-4-2013

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK102 for Diesel Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than 25.0% .

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Diesel Range Organics - Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1308948

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	MW-1451-6-2013	**Units:**	ug/L
Lab Code:	K1308948-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**5600**	Y	49	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	118	50-150	09/11/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/27/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	MW-1451-2-2013	**Units:**	ug/L
Lab Code:	K1308948-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**6200**	Y	49	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	117	50-150	09/11/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	MW-1451-3-2013	**Units:**	ug/L
Lab Code:	K1308948-005	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1300**	Y	49	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	96	50-150	09/11/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1308948
Project:	TO66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/28/2013
Sample Matrix:	Water	**Date Received:**	08/30/2013

Diesel Range Organics

Sample Name:	MW-1451-4-2013	**Units:**	ug/L
Lab Code:	K1308948-006	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**160**	Y	49	20	11	1	09/09/13	09/11/13	KWG1309751	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	91	50-150	09/11/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 27 through August 28, 2013
LDC Report Date:	October 28, 2013
Matrix:	Water
Parameters:	Methane
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1308946

Sample Identification

MW-1451-6-2013
MW-1451-2-2013
MW-1451-12-2013
MW-1451-3-2013
MW-1451-4-2013
MW-303-43-2013
MW-303-44-2013
MW-303-40-2013

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method RSK-175 for Methane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% .

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No methane was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Not required by the method.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples MW-1451-2-2013 and MW-1451-12-2013 were identified as field duplicates. No methane was detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	MW-1451-2-2013	MW-1451-12-2013	
Methane	10000	9200	8 (≤50)

Adak LTM 2013
Methane - Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Methane - Laboratory Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

Adak LTM 2013
Methane - Field Blank Data Qualification Summary - SDG K1308946

No Sample Data Qualified in this SDG

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Sealaska Environmental Services, LLC**
Client Project ID: **TO66, Adak LTM 2013 / 14005.066.301**

ALS Project ID: K1308948

Methane

Test Code: RSK 175
Instrument ID: HP5890A/GC10/FID
Analyst: Wade Henton
Matrix: Water
Test Notes:

Date(s) Collected: 8/27 - 8/29/13
Date Received: 8/30/13
Date Analyzed: 9/9/13

Client Sample ID	ALS Sample ID	Injection Volume ml(s)	Result µg/L	LOQ µg/L	LOD µg/L	MDL µg/L	Data Qualifier
MW-1451-6-2013	K1308948-001	0.10	**2,200**	1.3	0.61	0.30	
MW-1451-2-2013	K1308948-002	0.10	**10,000**	1.3	0.61	0.30	
MW-1451-12-2013	K1308948-003	0.10	**9,200**	1.3	0.61	0.30	
MW-1451-3-2013	K1308948-005	0.10	**630**	1.3	0.61	0.30	
MW-1451-4-2013	K1308948-006	0.10	**6.0**	1.3	0.61	0.30	
MW-303-43-2013	K1308948-007	0.10	**0.64**	1.3	0.61	0.30	**J**
MW-303-44-2013	K1308948-008	0.10	0.61	1.3	0.61	0.30	**U**
MW-303-40-2013	K1308948-009	0.10	**180**	1.3	0.61	0.30	
Method Control Sample	P130909-MB	0.10	0.61	1.3	0.61	0.30	**U**

The Method Control Sample is laboratory water carried through the entire analytical process.
U = Compound was analyzed for, but not detected above the laboratory detection limit.
LOQ = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

10/31/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 10, 2013
LDC Report Date:	October 31, 2013
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309580

Sample Identification

TB091013B
MRP-MW3-2013

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Volatiles which are Benzene, Toluene, Ethylbenzene and Xylenes (BTEX).

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample TB091013B was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Volatiles - Data Qualification Summary - SDG K1309580

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1309580

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Field Blank Data Qualification Summary - SDG K1309580

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/10/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Volatile Organic Compounds

Sample Name:	TB091013 B	**Units:**	ug/L
Lab Code:	K1309580-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/22/13	09/22/13	KWG1310337	
Toluene	ND	U	0.50	0.10	0.054	1	09/22/13	09/22/13	KWG1310337	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/22/13	09/22/13	KWG1310337	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/22/13	09/22/13	KWG1310337	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/22/13	09/22/13	KWG1310337	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	96	70-120	09/22/13	Acceptable
Dibromofluoromethane	93	85-115	09/22/13	Acceptable
Toluene-d8	99	85-120	09/22/13	Acceptable
4-Bromofluorobenzene	91	75-120	09/22/13	Acceptable

9/10/31/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309580
Date Collected: 09/10/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: MRP-MW3-2013
Lab Code: K1309580-008

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**1.6**	JD	5.0	1.0	0.62	10	09/23/13	09/23/13	KWG1310377	
Toluene	**280**	D	5.0	1.0	0.54	10	09/23/13	09/23/13	KWG1310377	
Ethylbenzene	**2200**	D	50	10	5.0	100	09/23/13	09/23/13	KWG1310377	
m,p-Xylenes	**10000**	D	50	20	11	100	09/23/13	09/23/13	KWG1310377	
o-Xylene	**2600**	D	50	20	7.4	100	09/23/13	09/23/13	KWG1310377	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	70-120	09/23/13	Acceptable
Dibromofluoromethane	91	85-115	09/23/13	Acceptable
Toluene-d8	99	85-120	09/23/13	Acceptable
4-Bromofluorobenzene	93	75-120	09/23/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 9 through September 10, 2013
LDC Report Date:	October 28, 2013
Matrix:	Water
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309580

Sample Identification

TB090913B
03-502-2013
MRP-MW3-2013

Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK101 for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 25.0%.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks.

Sample TB090913B was identified as a trip blank. No gasoline range organic contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1309580

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309580

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1309580

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Gasoline Range Organics

Sample Name:	TB090913 B	**Units:**	ug/L
Lab Code:	K1309580-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/22/13	09/22/13	KWG1310329	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	91	50-150	09/22/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Gasoline Range Organics

Sample Name:	03-502-2013	**Units:**	ug/L
Lab Code:	K1309580-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**3300**	Y	100	25	13	1	09/22/13	09/22/13	KWG1310329	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	94	50-150	09/22/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/10/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Gasoline Range Organics

Sample Name:	MRP-MW3-2013	**Units:**	ug/L
Lab Code:	K1309580-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**60000**	DY	1000	250	130	10	09/23/13	09/23/13	KWG1310406	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	86	50-150	09/23/13	Acceptable

10/31/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2013

Collection Date: September 9 through September 11, 2013

LDC Report Date: October 28, 2013

Matrix: Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1309580

Sample Identification

RW-303-13-2013
AMW-704-2013
RW-303-16-2013
MW-303-7-2013
MRP-MW3-2013
MW-146-1-2013
MW-107-1-2013
03-104-2013
03-778-2013
MW-134-11-2013
03-619-2013
RW-303-13-2013MS
RW-303-13-2013MSD
03-619-2013MS
03-619-2013MSD

Introduction

This data review covers 15 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK102 for Diesel Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than 25.0% .

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Diesel Range Organics - Data Qualification Summary - SDG K1309580

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309580

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1309580

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	RW-303-13-2013	**Units:**	ug/L
Lab Code:	K1309580-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**430**	Y	49	20	11	1	09/17/13	09/25/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	93	50-150	09/25/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	AMW-704-2013	**Units:**	ug/L
Lab Code:	K1309580-003	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1500**	Y	49	20	11	1	09/17/13	09/25/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	109	50-150	09/25/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	RW-303-16-2013	**Units:**	ug/L
Lab Code:	K1309580-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**4800**	Y	49	20	11	1	09/17/13	09/25/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	99	50-150	09/25/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	MW-303-7-2013	**Units:**	ug/L
Lab Code:	K1309580-006	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**15000**	Y	49	20	11	1	09/17/13	09/25/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	121	50-150	09/25/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/10/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	MRP-MW3-2013	**Units:**	ug/L
Lab Code:	K1309580-008	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**4600**	L	49	20	11	1	09/17/13	09/24/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	99	50-150	09/24/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/10/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	MW-146-1-2013	**Units:**	ug/L
Lab Code:	K1309580-009	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**9000**	Y	49	20	11	1	09/17/13	09/25/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	123	50-150	09/25/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/10/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	MW-107-1-2013	**Units:**	ug/L
Lab Code:	K1309580-010	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**2700**	Y	49	20	11	1	09/17/13	09/25/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	101	50-150	09/25/13	Acceptable

10/31/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/10/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	03-104-2013	**Units:**	ug/L
Lab Code:	K1309580-011	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**5500**	Y	49	20	11	1	09/17/13	09/25/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	98	50-150	09/25/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/11/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	03-778-2013	**Units:**	ug/L
Lab Code:	K1309580-012	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1700**	Y	49	20	11	1	09/17/13	09/25/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	94	50-150	09/25/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/11/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	MW-134-11-2013	**Units:**	ug/L
Lab Code:	K1309580-013	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**4300**	Y	49	20	11	1	09/17/13	09/25/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	91	50-150	09/25/13	Acceptable

10/31/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309580
Project:	TO 66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/11/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	03-619-2013	**Units:**	ug/L
Lab Code:	K1309580-014	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**360**	Y	49	20	11	1	09/17/13	09/25/13	KWG1310441	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/25/13	Acceptable

10/31/13

Comments:

LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 7, 2013

SUBJECT: ADAK LTM 2013, TO 66, Data Validation

Dear Ms. Wunderlich,

Enclosed are the final validation reports for the fractions listed below with form 1s. These SDGs were received on October 9, 2013. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 30550:

SDG #	Fraction
K1309205	Volatiles, Polynuclear Aromatic Hydrocarbons, Polychlorinated
K1309212	Biphenyls, Metals, Gasoline Range Organics, Diesel Range
K1309582	Organics, Bis(2-ethylhexyl)phthalate, Wet Chemistry

The data validation was performed under EPA Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2010

Please feel free to contact us if you have any questions.

Sincerely,

Ming-Hwa Hwang
Project Manager/Senior Chemist

L:\Sealaska\Adak\30550COV.wpd

Attachment 1

Level IV

LDC #30550 (Sealaska-Poulsbo, WA / Adak LTM 2013, TO 66)

Project #14005.066.301

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (8260B)		BTEX (8260B)		Benzene (8260B)		BEHP (8270D)		PAHs (8270D -SIM)		PCBs (8082A)		Metals (6020A /7000)		Diss. Metals (SW846)		Sb,As Ni (6020A)		GRO (101)		DRO (AK102)		Alk. (2320B)		NH_3-N (4500 -NH3-G)		COD (5220C)		SO_4 (300.0)		TDS (2540C)		TKN (D1426 -93B)			
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1309205	10/09/13	10/30/13	-	-	3	0	2	0	-	-	2	3	-	-	-	-	-	-	-	-	12	0	13	3	-	-	-	-	-	-	-	-	-	-	-	-		
B	K1309212	10/09/13	10/30/13	-	-	-	-			0	4	0	4	0	4	-	-	-	-	0	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
C	K1309582	10/09/13	10/30/13	10	0	-	-	-	-	-	-	-	-	-	-	11	0	11	0	-	-	-	-	-	-	11	0	11	0	11	0	11	0	11	0	11	0		
Total	T/MH			10	0	3	0	2	0	0	4	2	7	0	4	11	0	11	0	0	4	12	0	13	3	11	0	11	0	11	0	11	0	11	0	11	0	0	152

Shaded cells indicate Level IV validation (all other cells are ADEC Checklist validation). These sample counts do not inclute MS/MSD, and DUPs

30550ST.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 3 through September 5, 2013
LDC Report Date:	October 30, 2013
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309205

Sample Identification

TB090313A
NSWSD-8-2013
852-2013
08-200-2013
08-202-2013
08-200-2013MS
08-200-2013MSD

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Volatiles which are Benzene, Toluene, Ethylbenzene and Xylenes (BTEX).

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample TB090313A was identified as a trip blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB090313A	9/3/13	Benzene	0.16 ug/L	NSWSD-8-2013 852-2013 08-200-2013 08-202-2013

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
08-200-2013MS/MSD (08-200-2013)	Benzene	-	74 (80-120)	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Volatiles - Data Qualification Summary - SDG K1309205

SDG	Sample	Compound	Flag	A or P	Reason
K1309205	08-200-2013	Benzene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)

Adak LTM 2013
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1309205

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Field Blank Data Qualification Summary - SDG K1309205

No Sample Data Qualified in this SDG

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309205
Date Collected: 09/03/2013
Date Received: 09/06/2013

Volatile Organic Compounds

Sample Name: TB090313A
Lab Code: K1309205-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.16**	J	0.50	0.10	0.062	1	09/12/13	09/12/13	KWG1309912	
Toluene	ND	U	0.50	0.10	0.054	1	09/12/13	09/12/13	KWG1309912	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/12/13	09/12/13	KWG1309912	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/12/13	09/12/13	KWG1309912	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/12/13	09/12/13	KWG1309912	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	70-120	09/12/13	Acceptable
Dibromofluoromethane	104	85-115	09/12/13	Acceptable
Toluene-d8	106	85-120	09/12/13	Acceptable
4-Bromofluorobenzene	98	75-120	09/12/13	Acceptable

9/17/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Volatile Organic Compounds

Sample Name:	NSWSD-8-2013	**Units:**	ug/L
Lab Code:	K1309205-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/13/13	09/13/13	KWG1309912	
Toluene	ND	U	0.50	0.10	0.054	1	09/13/13	09/13/13	KWG1309912	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/13/13	09/13/13	KWG1309912	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/13/13	09/13/13	KWG1309912	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/13/13	09/13/13	KWG1309912	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	104	70-120	09/13/13	Acceptable
Dibromofluoromethane	106	85-115	09/13/13	Acceptable
Toluene-d8	104	85-120	09/13/13	Acceptable
4-Bromofluorobenzene	98	75-120	09/13/13	Acceptable

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309205
Date Collected: 09/03/2013
Date Received: 09/06/2013

Volatile Organic Compounds

Sample Name: 852-2013
Lab Code: K1309205-005

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/13/13	09/13/13	KWG1309912	
Toluene	ND	U	0.50	0.10	0.054	1	09/13/13	09/13/13	KWG1309912	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/13/13	09/13/13	KWG1309912	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/13/13	09/13/13	KWG1309912	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/13/13	09/13/13	KWG1309912	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	104	70-120	09/13/13	Acceptable
Dibromofluoromethane	105	85-115	09/13/13	Acceptable
Toluene-d8	107	85-120	09/13/13	Acceptable
4-Bromofluorobenzene	99	75-120	09/13/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/04/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Volatile Organic Compounds

Sample Name:	08-200-2013	**Units:**	ug/L
Lab Code:	K1309205-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	260	JD J	5.0	1.0	0.62	10	09/12/13	09/12/13	KWG1309912	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	104	70-120	09/13/13	Acceptable
Dibromofluoromethane	105	85-115	09/13/13	Acceptable
Toluene-d8	106	85-120	09/13/13	Acceptable
4-Bromofluorobenzene	100	75-120	09/13/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Volatile Organic Compounds

Sample Name:	08-202-2013	**Units:**	ug/L
Lab Code:	K1309205-011	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**9.3**		0.50	0.10	0.062	1	09/13/13	09/13/13	KWG1309981	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	103	70-120	09/13/13	Acceptable
Dibromofluoromethane	105	85-115	09/13/13	Acceptable
Toluene-d8	105	85-120	09/13/13	Acceptable
4-Bromofluorobenzene	100	75-120	09/13/13	Acceptable

11/7/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 2 through September 3, 2013
LDC Report Date:	October 30, 2013
Matrix:	Sediment/Water
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309205

Sample Identification

NSWSD-4S-2013
NSWSD-4S-2013RE
NSWSD-5S-2013
NSWSD-8-2013
852-2013
NSWSD-2S-2013
NSWSD-4S-2013REMS
NSWSD-4S-2013REMSD

Introduction

This data review covers 6 sediment samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270D using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Extraction	Required Holding Time (in Days) From Sample Collection Until Extraction	Flag	A or P
NSWSD-4S-2013RE NSWSD-4S-2013REMS NSWSD-4S-2013REMSD	All TCL compounds	16	14	J (all detects) UJ (all non-detects)	A

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% .

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG1309726-3	9/10/13	Naphthalene 2-Methylnaphthalene	0.0055 ug/L 0.0031 ug/L	All samples in SDG K1309205

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
NSWSD-8-2013	Naphthalene 2-Methylnaphthalene	0.013 ug/L 0.0036 ug/L	0.020U ug/L 0.020U ug/L
852-2013	2-Methylnaphthalene	0.014 ug/L	0.020U ug/L

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG1309726-1/2 (All water samples in SDG K1309205)	Benzo(a)pyrene	112 (55-110)	112 (55-110)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
NSWSD-4S-2013RE	All TCL compounds	R	A

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1309205

SDG	Sample	Compound	Flag	A or P	Reason
K1309205	NSWSD-4S-2013RE	All TCL compounds	J (all detects) UJ (all non-detects)	A	Technical holding time
K1309205	NSWSD-8-2013 852-2013	Benzo(a)pyrene	J (all detects)	P	Laboratory control samples (%R)
K1309205	NSWSD-4S-2013RE	All TCL compounds	R	A	Overall assessment of data

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1309205

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K1309205	NSWSD-8-2013	Naphthalene 2-Methylnaphthalene	0.020U ug/L 0.020U ug/L	A
K1309205	852-2013	2-Methylnaphthalene	0.020U ug/L	A

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1309205

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/02/2013
Sample Matrix:	Sediment	**Date Received:**	09/06/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	NSWSD-4S-2013	**Units:**	ug/Kg
Lab Code:	K1309205-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Methylnaphthalene	**0.62**	J	3.2	1.0	0.58	1	09/12/13	09/19/13	KWG1309825	
Phenanthrene	**3.1**	JX	3.2	1.0	1.4	1	09/12/13	09/19/13	KWG1309825	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	66	17-104	09/19/13	Acceptable
Fluoranthene-d10	87	27-106	09/19/13	Acceptable
Terphenyl-d14	85	35-109	09/19/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/02/2013
Sample Matrix:	Sediment	**Date Received:**	09/06/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	NSWSD-4S-2013	**Units:**	ug/Kg
Lab Code:	K1309205-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Methylnaphthalene	ND	U	R	5.0	1.0	0.58	1	09/18/13	09/24/13	KWG1310131	*
Phenanthrene	**3.9**	JX	R	5.0	1.0	1.4	1	09/18/13	09/24/13	KWG1310131	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	62	17-104	09/24/13	Acceptable
Fluoranthene-d10	81	27-106	09/24/13	Acceptable
Terphenyl-d14	82	35-109	09/24/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/02/2013
Sample Matrix:	Sediment	**Date Received:**	09/06/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	NSWSD-5S-2013	**Units:**	ug/Kg
Lab Code:	K1309205-002	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Methylnaphthalene	**2.0**	J	3.5	1.0	0.58	1	09/12/13	09/22/13	KWG1309825	
Phenanthrene	**21**		3.5	1.0	1.4	1	09/12/13	09/22/13	KWG1309825	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	73	17-104	09/22/13	Acceptable
Fluoranthene-d10	114	27-106	09/22/13	Outside Control Limits
Terphenyl-d14	99	35-109	09/22/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	NSWSD-8-2013	**Units:**	ug/L
Lab Code:	K1309205-004	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.013**	J 0.020U	0.020	0.0050	0.0030	1	09/10/13	09/14/13	KWG1309726	
2-Methylnaphthalene	**0.0036**	J 0.020U	0.020	0.0050	0.0023	1	09/10/13	09/14/13	KWG1309726	
Acenaphthylene	ND	U	0.020	0.0050	0.0034	1	09/10/13	09/14/13	KWG1309726	
Acenaphthene	**0.0053**	J	0.020	0.0050	0.0044	1	09/10/13	09/14/13	KWG1309726	
Fluorene	**0.0058**	J	0.020	0.0050	0.0038	1	09/10/13	09/14/13	KWG1309726	
Phenanthrene	ND	U	0.020	0.0050	0.0080	1	09/10/13	09/14/13	KWG1309726	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/10/13	09/14/13	KWG1309726	
Fluoranthene	**0.0046**	J	0.020	0.0050	0.0044	1	09/10/13	09/14/13	KWG1309726	
Pyrene	**0.0041**	J	0.020	0.0050	0.0035	1	09/10/13	09/14/13	KWG1309726	
Benz(a)anthracene	**0.0036**	JX	0.020	0.0050	0.0026	1	09/10/13	09/14/13	KWG1309726	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/10/13	09/14/13	KWG1309726	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/10/13	09/14/13	KWG1309726	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/10/13	09/14/13	KWG1309726	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/10/13	09/14/13	KWG1309726	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/10/13	09/14/13	KWG1309726	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/10/13	09/14/13	KWG1309726	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/10/13	09/14/13	KWG1309726	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	96	28-98	09/14/13	Acceptable
Fluoranthene-d10	101	31-105	09/14/13	Acceptable
Terphenyl-d14	110	27-112	09/14/13	Acceptable

MH 11/19/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	852-2013	**Units:**	ug/L
Lab Code:	K1309205-005	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.043**			0.020	0.0050	0.0030	1	09/10/13	09/14/13	KWG1309726	
2-Methylnaphthalene	**0.014**	J	0.020U	0.020	0.0050	0.0023	1	09/10/13	09/14/13	KWG1309726	
Acenaphthylene	**0.0067**	JX		0.020	0.0050	0.0034	1	09/10/13	09/14/13	KWG1309726	
Acenaphthene	**0.029**			0.020	0.0050	0.0044	1	09/10/13	09/14/13	KWG1309726	
Fluorene	**0.070**			0.020	0.0050	0.0038	1	09/10/13	09/14/13	KWG1309726	
Phenanthrene	**0.024**			0.020	0.0050	0.0080	1	09/10/13	09/14/13	KWG1309726	
Anthracene	**0.0096**	J		0.020	0.0050	0.0036	1	09/10/13	09/14/13	KWG1309726	
Fluoranthene	**0.044**			0.020	0.0050	0.0044	1	09/10/13	09/14/13	KWG1309726	
Pyrene	**0.041**			0.020	0.0050	0.0035	1	09/10/13	09/14/13	KWG1309726	
Benz(a)anthracene	**0.014**	J		0.020	0.0050	0.0026	1	09/10/13	09/14/13	KWG1309726	
Chrysene	**0.014**	J		0.020	0.0050	0.0034	1	09/10/13	09/14/13	KWG1309726	
Benzo(b)fluoranthene	**0.023**			0.020	0.0050	0.0023	1	09/10/13	09/14/13	KWG1309726	
Benzo(k)fluoranthene	**0.0095**	J		0.020	0.0050	0.0025	1	09/10/13	09/14/13	KWG1309726	
Benzo(a)pyrene	**0.014**	J	J	0.020	0.0050	0.0043	1	09/10/13	09/14/13	KWG1309726	
Indeno(1,2,3-cd)pyrene	**0.0097**	J		0.020	0.0050	0.0026	1	09/10/13	09/14/13	KWG1309726	
Dibenz(a,h)anthracene	**0.0026**	J		0.020	0.0050	0.0025	1	09/10/13	09/14/13	KWG1309726	
Benzo(g,h,i)perylene	**0.011**	J		0.020	0.0050	0.0029	1	09/10/13	09/14/13	KWG1309726	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	84	28-98	09/14/13	Acceptable
Fluoranthene-d10	90	31-105	09/14/13	Acceptable
Terphenyl-d14	94	27-112	09/14/13	Acceptable

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Sediment

Service Request: K1309205
Date Collected: 09/03/2013
Date Received: 09/06/2013

Polynuclear Aromatic Hydrocarbons

Sample Name: NSWSD-2S-2013
Lab Code: K1309205-006

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270D SIM

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Methylnaphthalene	**2.3**	J	3.2	1.0	0.58	1	09/12/13	09/22/13	KWG1309825	
Phenanthrene	**24**		3.2	1.0	1.4	1	09/12/13	09/22/13	KWG1309825	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	70	17-104	09/22/13	Acceptable
Fluoranthene-d10	83	27-106	09/22/13	Acceptable
Terphenyl-d14	90	35-109	09/22/13	Acceptable

11/7/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 2 through September 3, 2013
LDC Report Date:	November 6, 2013
Matrix:	Water
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309205

Sample Identification

TB090313A
E-201-2013
TB090213B
02-479-2013
NMCB-09-2013
02-461-2013
02-818-2013
02-451-2013
04-100-2013
04-110-2013
02-451-2013MS
02-451-2013MSD
TB090213CS
NL-05S-2013

Introduction

This data review covers 2 sediment samples 12 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK101 for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 25.0%.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
KWG1310210-3	9/16/13	C6-C10 Gasoline range organics	13 ug/L	02-479-2013

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

Samples TB090313A, TB090213CS, and TB090213B were identified as trip blanks. No gasoline range organic contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples 04-100-2013 and 04-110-2013 were identified as field duplicates. No gasoline range organics were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	04-100-2013	04-110-2013	
Gasoline range organics (C6-C10)	2900	3000	3 (≤50)

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1309205

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309205

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1309205

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Gasoline Range Organics

Sample Name:	TB090313A	**Units:**	ug/L
Lab Code:	K1309205-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/14/13	09/14/13	KWG1310108	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	98	50-150	09/14/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Gasoline Range Organics

Sample Name:	E-201-2013	**Units:**	ug/L
Lab Code:	K1309205-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**7900**	Y	100	25	13	1	09/14/13	09/14/13	KWG1310108	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	108	50-150	09/14/13	Acceptable

11/7/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/02/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Gasoline Range Organics

Sample Name:	TB090213B	**Units:**	ug/L
Lab Code:	K1309205-015	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/14/13	09/14/13	KWG1310108	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	98	50-150	09/14/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/02/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Gasoline Range Organics

Sample Name:	02-479-2013	**Units:**	ug/L
Lab Code:	K1309205-016	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/16/13	09/16/13	KWG1310210	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	94	50-150	09/16/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Gasoline Range Organics

Sample Name:	NMCB-09-2013	**Units:**	ug/L
Lab Code:	K1309205-017	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**210**	Y	100	25	13	1	09/14/13	09/14/13	KWG1310108	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	94	50-150	09/14/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Gasoline Range Organics

Sample Name:	02-461-2013	**Units:**	ug/L
Lab Code:	K1309205-018	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**7000**	Y	100	25	13	1	09/14/13	09/14/13	KWG1310108	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	113	50-150	09/14/13	Acceptable

K 11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Gasoline Range Organics

Sample Name:	02-818-2013	**Units:**	ug/L
Lab Code:	K1309205-019	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**6900**	Y	100	25	13	1	09/14/13	09/14/13	KWG1310108	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	102	50-150	09/14/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Gasoline Range Organics

Sample Name:	02-451-2013	**Units:**	ug/L
Lab Code:	K1309205-020	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	14	J	100	25	13	1	09/14/13	09/14/13	KWG1310108	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	50-150	09/14/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Gasoline Range Organics

Sample Name:	04-100-2013	**Units:**	ug/L
Lab Code:	K1309205-030	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**2900**	Y	100	25	13	1	09/14/13	09/14/13	KWG1310108	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	99	50-150	09/14/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Gasoline Range Organics

Sample Name:	04-110-2013	**Units:**	ug/L
Lab Code:	K1309205-031	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**3000**	Y	100	25	13	1	09/14/13	09/14/13	KWG1310108	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	99	50-150	09/14/13	Acceptable

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Sediment

Service Request: K1309205
Date Collected: 09/02/2013
Date Received: 09/06/2013

Gasoline Range Organics

Sample Name: TB090213CS
Lab Code: K1309205-028

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 5035A/5030B
Analysis Method: AK101

Level: Med

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	20	2.5	1.5	1	09/02/13	09/26/13	KWG1310645	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	85	50-150	09/26/13	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Sediment

Service Request: K1309205
Date Collected: 09/02/2013
Date Received: 09/06/2013

Gasoline Range Organics

Sample Name: NL-05S-2013
Lab Code: K1309205-029

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 5035A/5030B
Analysis Method: AK101

Level: Med

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	22	2.7	1.6	1	09/02/13	09/26/13	KWG1310645	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	116	50-150	09/26/13	Acceptable

11/7/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2013

Collection Date: September 2 through September 5, 2013

LDC Report Date: November 25, 2013

Matrix: Sediment/Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1309205

Sample Identification

NSWSD-4S-2013	NSWSD-4S-2013REMSD
NSWSD-5S-2013	
NSWSD-8-2013	
852-2013	
NSWSD-2S-2013	
04-306-2013	
04-175-2013	
MRP-MW8-2013	
MRP-MW18-2013	
02-230-2013	
04-601-2013	
04-290-2013	
04-300-2013	
04-159-2013	
04-158-2013	
04-173-2013	
04-601-2013MS	
04-601-2013MSD	
NSWSD-4S-2013RE	
NSWSD-4S-2013REMS	

Introduction

This data review covers 6 sediment samples and 15 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK102 for Diesel Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Extraction	Required Holding Time (in Days) From Sample Collection Until Extraction	Flag	A or P
NSWSD-4S-2013RE NSWSD-4S-2013REMS NSWSD-4S-2013REMSD	All TCL compounds	21	14	J (all detects) UJ (all non-detects)	A

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than 25.0% .

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
NSWSD-4S-2013RE	Diesel range organics (C10-C25)	R	A

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples MRP-MW8-2013 and MRP-MW18-2013 and samples 04-290-2013 and 04-300-2013 were identified as field duplicates. No diesel range organics were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	MRP-MW8-2013	MRP-MW18-2013	
Diesel range organics	3600	3300	9 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	04-290-2013	04-300-2013	
Diesel range organics	5000	4500	11 (≤50)

Adak LTM 2013
Diesel Range Organics - Data Qualification Summary - SDG K1309205

SDG	Sample	Compound	Flag	A or P	Reason
K1309205	NSWSD-4S-2013RE	All TCL compounds	J (all detects) UJ (all non-detects)	A	Technical holding time
K1309205	NSWSD-4S-2013RE	Diesel range organics (C10-C25)	R	A	Overall assessment of data

Adak LTM 2013
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309205

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1309205

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/02/2013
Sample Matrix:	Sediment	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	NSWSD-4S-2013	**Units:**	mg/Kg
Lab Code:	K1309205-001	**Basis:**	Dry
Extraction Method:	EPA 3550B	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	97	DY	26	13	4.9	3	09/16/13	09/18/13	KWG1310028	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	92	50-150	09/18/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Scalaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/02/2013
Sample Matrix:	Sediment	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	NSWSD-4S-2013	**Units:**	mg/Kg
Lab Code:	K1309205-001	**Basis:**	Dry
Extraction Method:	EPA 3550B	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**82**	Y R	8.5	4.2	1.7	1	09/23/13	09/24/13	KWG1310267	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	95	50-150	09/24/13	Acceptable

Comments: 1/4/11/2013

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/02/2013
Sample Matrix:	Sediment	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	NSWSD-5S-2013	**Units:**	mg/Kg
Lab Code:	K1309205-002	**Basis:**	Dry
Extraction Method:	EPA 3550B	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**170**	DY	47	23	9.1	5	09/16/13	09/18/13	KWG1310028	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	85	50-150	09/18/13	Acceptable

9/11/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	NSWSD-8-2013	**Units:**	ug/L
Lab Code:	K1309205-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	29	J	48	20	11	1	09/11/13	09/13/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	50-150	09/13/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	852-2013	**Units:**	ug/L
Lab Code:	K1309205-005	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**63**	Y	48	20	11	1	09/11/13	09/13/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	99	50-150	09/13/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Sediment	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	NSWSD-2S-2013	**Units:**	mg/Kg
Lab Code:	K1309205-006	**Basis:**	Dry
Extraction Method:	EPA 3550B	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**580**	DY	86	42	17	10	09/16/13	09/18/13	KWG1310028	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	82	50-150	09/18/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	04-306-2013	**Units:**	ug/L
Lab Code:	K1309205-008	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**4000**	Y	49	20	11	1	09/11/13	09/13/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	50-150	09/13/13	Acceptable

11/7/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	04-175-2013	**Units:**	ug/L
Lab Code:	K1309205-009	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**11000**	Y	48	20	11	1	09/11/13	09/14/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	109	50-150	09/14/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	MRP-MW8-2013	**Units:**	ug/L
Lab Code:	K1309205-012	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**3600**	Y	48	20	11	1	09/11/13	09/13/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	91	50-150	09/13/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	MRP-MW18-2013	**Units:**	ug/L
Lab Code:	K1309205-013	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**3300**	Y	48	20	11	1	09/11/13	09/14/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	09/14/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	02-230-2013	**Units:**	ug/L
Lab Code:	K1309205-014	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**3500**	Y	48	20	11	1	09/11/13	09/14/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	100	50-150	09/14/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	04-601-2013	**Units:**	ug/L
Lab Code:	K1309205-021	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	55	H	49	20	11	1	09/11/13	09/13/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	09/13/13	Acceptable

K 11/7/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	04-290-2013	**Units:**	ug/L
Lab Code:	K1309205-022	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**5000**	Y	49	20	11	1	09/11/13	09/13/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	93	50-150	09/13/13	Acceptable

9/11/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	04-300-2013	**Units:**	ug/L
Lab Code:	K1309205-023	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**4500**	Y	49	20	11	1	09/11/13	09/13/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	09/13/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/03/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	04-159-2013	**Units:**	ug/L
Lab Code:	K1309205-024	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**3400**	Y	50	20	11	1	09/11/13	09/13/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	79	50-150	09/13/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/04/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	04-158-2013	**Units:**	ug/L
Lab Code:	K1309205-025	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**7500**	Y	50	20	11	1	09/11/13	09/14/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	87	50-150	09/14/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309205
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/06/2013

Diesel Range Organics

Sample Name:	04-173-2013	**Units:**	ug/L
Lab Code:	K1309205-026	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**3100**	Y	49	20	11	1	09/11/13	09/13/13	KWG1309895	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	89	50-150	09/13/13	Acceptable

9/11/7/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2010
Collection Date:	September 4, 2013
LDC Report Date:	October 30, 2013
Matrix:	Sediment
Parameters:	Bis(2-ethylhexyl)phthalate
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309212

Sample Identification

102S-2013
112S-2013
103S-2013
101S-2013
101S-2013MS
101S-2013MSD

Introduction

This data review covers 6 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270D for Bis(2-ethylhexyl)phthalate.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for Bis(2-ethylhexyl)phthalate.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for Bis(2-ethylhexyl)phthalate.

The percent difference (%D) of the second source calibration standard were less than or equal to 30.0% for Bis(2-ethylhexyl)phthalate.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No bis(2-ethylhexyl)phthalate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 102S-2013 and 112S-2013 were identified as field duplicates. No bis(2-ethylhexyl)phthalate was detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)
	102S-2013	112S-2013	
Bis(2-ethylhexyl)phthalate	170	1200U	Not calculable

Adak LTM 2010
Bis(2-ethylhexyl)phthalate - Data Qualification Summary - SDG K1309212

No Sample Data Qualified in this SDG

Adak LTM 2010
Bis(2-ethylhexyl)phthalate - Laboratory Blank Data Qualification Summary - SDG K1309212

No Sample Data Qualified in this SDG

Adak LTM 2010
Bis(2-ethylhexyl)phthalate - Field Blank Data Qualification Summary - SDG K1309212

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309212
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/04/2013
Sample Matrix:	Soil	**Date Received:**	09/06/2013

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	102S-2013	**Units:**	ug/Kg
Lab Code:	K1309212-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Bis(2-ethylhexyl) Phthalate	**170**	JD	1300	130	120	10	09/16/13	09/26/13	KWG1310007	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Terphenyl-d14	58	33-129	09/26/13	Acceptable

11/7/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309212
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/04/2013
Sample Matrix:	Soil	**Date Received:**	09/06/2013

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	112S-2013	**Units:**	ug/Kg
Lab Code:	K1309212-002	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Bis(2-ethylhexyl) Phthalate	ND	U	1200	120	110	10	09/16/13	09/26/13	KWG1310007	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Terphenyl-d14	55	33-129	09/26/13	Acceptable

9/11/7/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309212
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/04/2013
Sample Matrix:	Soil	**Date Received:**	09/06/2013

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	103S-2013	**Units:**	ug/Kg
Lab Code:	K1309212-003	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Bis(2-ethylhexyl) Phthalate	ND	U	64	10	8.9	1	09/16/13	09/26/13	KWG1310007	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Terphenyl-d14	55	33-129	09/26/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309212
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/04/2013
Sample Matrix:	Soil	**Date Received:**	09/06/2013

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	101S-2013	**Units:**	ug/Kg
Lab Code:	K1309212-004	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Bis(2-ethylhexyl) Phthalate	ND	U	79	10	8.9	1	09/16/13	09/26/13	KWG1310007	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Terphenyl-d14	55	33-129	09/26/13	Acceptable

11/7/13

Comments:

LDC Report# 30550B2b

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 4, 2013
LDC Report Date:	October 30, 2013
Matrix:	Sediment
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309212

Sample Identification

102S-2013
112S-2013
103S-2013
101S-2013
101S-2013MS
101S-2013MSD

Introduction

This data review covers 6 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270D using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% .

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 102S-2013 and 112S-2013 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)
	102S-2013	112S-2013	
Naphthalene	4.3	10	80 (≤50)
2-Methylnaphthalene	4.3	11	88 (≤50)
Acenaphthylene	3.3	14	124 (≤50)
Acenaphthene	3.1	87	186 (≤50)
Fluorene	5.3	92	178 (≤50)
Phenanthrene	43	450	165 (≤50)
Anthracene	13	83	146 (≤50)
Fluoranthene	140	3500	185 (≤50)
Pyrene	170	2000	169 (≤50)
Benzo(a)anthracene	120	400	108 (≤50)
Chrysene	150	570	117 (≤50)
Benzo(b)fluoranthene	230	400	54 (≤50)
Benzo(k)fluoranthene	78	140	57 (≤50)
Benzo(a)pyrene	180	220	20 (≤50)
Indeno(1,2,3-cd)pyrene	140	140	0 (≤50)
Dibenz(a,h)anthracene	29	36	22 (≤50)
Benzo(g,h,i)perylene	130	130	0 (≤50)

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1309212

No Sample Data Qualified in this SDG

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1309212

No Sample Data Qualified in this SDG

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1309212

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309212
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/04/2013
Sample Matrix:	Soil	**Date Received:**	09/06/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	102S-2013	**Units:**	ug/Kg
Lab Code:	K1309212-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**4.3**	J	6.3	1.3	0.76	1	09/12/13	09/23/13	KWG1309825	
2-Methylnaphthalene	**4.3**	J	6.3	1.3	0.74	1	09/12/13	09/23/13	KWG1309825	
Acenaphthylene	**3.3**	J	6.3	1.3	0.71	1	09/12/13	09/23/13	KWG1309825	
Acenaphthene	**3.1**	J	6.3	1.3	0.63	1	09/12/13	09/23/13	KWG1309825	
Fluorene	**5.3**	J	6.3	1.3	0.77	1	09/12/13	09/23/13	KWG1309825	
Phenanthrene	**43**		6.3	1.3	1.8	1	09/12/13	09/23/13	KWG1309825	
Anthracene	**13**		6.3	1.3	0.70	1	09/12/13	09/23/13	KWG1309825	
Fluoranthene	**140**		6.3	1.3	1.3	1	09/12/13	09/23/13	KWG1309825	
Pyrene	**170**		6.3	1.3	0.96	1	09/12/13	09/23/13	KWG1309825	
Benz(a)anthracene	**120**		6.3	1.3	0.91	1	09/12/13	09/23/13	KWG1309825	
Chrysene	**150**	X	6.3	1.3	1.1	1	09/12/13	09/23/13	KWG1309825	
Benzo(b)fluoranthene	**230**		6.3	1.3	1.2	1	09/12/13	09/23/13	KWG1309825	
Benzo(k)fluoranthene	**78**		6.3	1.3	1.1	1	09/12/13	09/23/13	KWG1309825	
Benzo(a)pyrene	**180**		6.3	1.3	1.3	1	09/12/13	09/23/13	KWG1309825	
Indeno(1,2,3-cd)pyrene	**140**		6.3	1.3	1.1	1	09/12/13	09/23/13	KWG1309825	
Dibenz(a,h)anthracene	**29**		6.3	1.3	1.1	1	09/12/13	09/23/13	KWG1309825	
Benzo(g,h,i)perylene	**130**		6.3	1.3	1.1	1	09/12/13	09/23/13	KWG1309825	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	63	17-104	09/23/13	Acceptable
Fluoranthene-d10	70	27-106	09/23/13	Acceptable
Terphenyl-d14	75	35-109	09/23/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Soil

Service Request: K1309212
Date Collected: 09/04/2013
Date Received: 09/06/2013

Polynuclear Aromatic Hydrocarbons

Sample Name: 112S-2013
Lab Code: K1309212-002

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270D SIM

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**10**		5.8	1.2	0.69	1	09/12/13	09/22/13	KWG1309825	
2-Methylnaphthalene	**11**		5.8	1.2	0.67	1	09/12/13	09/22/13	KWG1309825	
Acenaphthylene	**14**		5.8	1.2	0.65	1	09/12/13	09/22/13	KWG1309825	
Acenaphthene	**87**		5.8	1.2	0.58	1	09/12/13	09/22/13	KWG1309825	
Fluorene	**92**		5.8	1.2	0.71	1	09/12/13	09/22/13	KWG1309825	
Phenanthrene	**450**		5.8	1.2	1.7	1	09/12/13	09/22/13	KWG1309825	
Anthracene	**83**		5.8	1.2	0.64	1	09/12/13	09/22/13	KWG1309825	
Fluoranthene	**3500**	D	29	5.8	5.7	5	09/12/13	09/19/13	KWG1309825	
Pyrene	**2000**	D	29	5.8	4.4	5	09/12/13	09/19/13	KWG1309825	
Benz(a)anthracene	**400**		5.8	1.2	0.83	1	09/12/13	09/22/13	KWG1309825	
Chrysene	**570**	X	5.8	1.2	0.92	1	09/12/13	09/22/13	KWG1309825	
Benzo(b)fluoranthene	**400**		5.8	1.2	1.1	1	09/12/13	09/22/13	KWG1309825	
Benzo(k)fluoranthene	**140**		5.8	1.2	1.0	1	09/12/13	09/22/13	KWG1309825	
Benzo(a)pyrene	**220**		5.8	1.2	1.2	1	09/12/13	09/22/13	KWG1309825	
Indeno(1,2,3-cd)pyrene	**140**		5.8	1.2	1.0	1	09/12/13	09/22/13	KWG1309825	
Dibenz(a,h)anthracene	**36**		5.8	1.2	0.92	1	09/12/13	09/22/13	KWG1309825	
Benzo(g,h,i)perylene	**130**		5.8	1.2	0.98	1	09/12/13	09/22/13	KWG1309825	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	65	17-104	09/22/13	Acceptable
Fluoranthene-d10	72	27-106	09/22/13	Acceptable
Terphenyl-d14	76	35-109	09/22/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309212
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/04/2013
Sample Matrix:	Soil	**Date Received:**	09/06/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	103S-2013	**Units:**	ug/Kg
Lab Code:	K1309212-003	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.2	1.0	0.60	1	09/12/13	09/19/13	KWG1309825	
2-Methylnaphthalene	ND	U	3.2	1.0	0.58	1	09/12/13	09/19/13	KWG1309825	
Acenaphthylene	ND	U	3.2	1.0	0.56	1	09/12/13	09/19/13	KWG1309825	
Acenaphthene	ND	U	3.2	1.0	0.50	1	09/12/13	09/19/13	KWG1309825	
Fluorene	ND	U	3.2	1.0	0.61	1	09/12/13	09/19/13	KWG1309825	
Phenanthrene	ND	U	3.2	1.0	1.4	1	09/12/13	09/19/13	KWG1309825	
Anthracene	ND	U	3.2	1.0	0.55	1	09/12/13	09/19/13	KWG1309825	
Fluoranthene	ND	U	3.2	1.0	0.98	1	09/12/13	09/19/13	KWG1309825	
Pyrene	ND	U	3.2	1.0	0.76	1	09/12/13	09/19/13	KWG1309825	
Benz(a)anthracene	ND	U	3.2	1.0	0.72	1	09/12/13	09/19/13	KWG1309825	
Chrysene	ND	U	3.2	1.0	0.80	1	09/12/13	09/19/13	KWG1309825	
Benzo(b)fluoranthene	ND	U	3.2	1.0	0.92	1	09/12/13	09/19/13	KWG1309825	
Benzo(k)fluoranthene	ND	U	3.2	1.0	0.87	1	09/12/13	09/19/13	KWG1309825	
Benzo(a)pyrene	ND	Ui	3.2	3.2	3.2	1	09/12/13	09/19/13	KWG1309825	
Indeno(1,2,3-cd)pyrene	ND	U	3.2	1.0	0.87	1	09/12/13	09/19/13	KWG1309825	
Dibenz(a,h)anthracene	ND	U	3.2	1.0	0.80	1	09/12/13	09/19/13	KWG1309825	
Benzo(g,h,i)perylene	ND	U	3.2	1.0	0.85	1	09/12/13	09/19/13	KWG1309825	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	72	17-104	09/19/13	Acceptable
Fluoranthene-d10	80	27-106	09/19/13	Acceptable
Terphenyl-d14	88	35-109	09/19/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Soil

Service Request: K1309212
Date Collected: 09/04/2013
Date Received: 09/06/2013

Polynuclear Aromatic Hydrocarbons

Sample Name: 101S-2013
Lab Code: K1309212-004

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270D SIM

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.74**	J	4.0	1.0	0.60	1	09/12/13	09/19/13	KWG1309825	
2-Methylnaphthalene	**0.87**	J	4.0	1.0	0.58	1	09/12/13	09/19/13	KWG1309825	
Acenaphthylene	ND	U	4.0	1.0	0.56	1	09/12/13	09/19/13	KWG1309825	
Acenaphthene	ND	U	4.0	1.0	0.50	1	09/12/13	09/19/13	KWG1309825	
Fluorene	ND	U	4.0	1.0	0.61	1	09/12/13	09/19/13	KWG1309825	
Phenanthrene	**3.6**	J	4.0	1.0	1.4	1	09/12/13	09/19/13	KWG1309825	
Anthracene	ND	U	4.0	1.0	0.55	1	09/12/13	09/19/13	KWG1309825	
Fluoranthene	**7.5**		4.0	1.0	0.98	1	09/12/13	09/19/13	KWG1309825	
Pyrene	**6.6**	X	4.0	1.0	0.76	1	09/12/13	09/19/13	KWG1309825	
Benz(a)anthracene	**2.0**	J	4.0	1.0	0.72	1	09/12/13	09/19/13	KWG1309825	
Chrysene	**4.9**	X	4.0	1.0	0.80	1	09/12/13	09/19/13	KWG1309825	
Benzo(b)fluoranthene	**3.9**	J	4.0	1.0	0.92	1	09/12/13	09/19/13	KWG1309825	
Benzo(k)fluoranthene	**1.1**	J	4.0	1.0	0.87	1	09/12/13	09/19/13	KWG1309825	
Benzo(a)pyrene	ND	Ui	5.0	5.0	5.0	1	09/12/13	09/19/13	KWG1309825	
Indeno(1,2,3-cd)pyrene	**2.2**	J	4.0	1.0	0.87	1	09/12/13	09/19/13	KWG1309825	
Dibenz(a,h)anthracene	ND	U	4.0	1.0	0.80	1	09/12/13	09/19/13	KWG1309825	
Benzo(g,h,i)perylene	**2.8**	J	4.0	1.0	0.85	1	09/12/13	09/19/13	KWG1309825	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	66	17-104	09/19/13	Acceptable
Fluoranthene-d10	70	27-106	09/19/13	Acceptable
Terphenyl-d14	78	35-109	09/19/13	Acceptable

11/7/13

Comments:

LDC Report# 30550B3b

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	ADAK LTM 2013
Collection Date:	September 4, 2013
LDC Report Date:	October 21, 2013
Matrix:	Sediment
Parameters:	Polychlorinated Biphenyls
Validation Level:	EPA Level IV
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K1309212

Sample Identification

102S-2013
112S-2013
103S-2013
101S-2013
103S-2013MS
103S-2013MSD

Introduction

This data review covers 6 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082A for Polychlorinated Biphenyls.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

All target compound identifications were within validation criteria.

XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples 102S-2013 and 112S-2013 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)
	102S-2013	112S-2013	
Aroclor-1254	38	56	38 (≤50)

Compound	Concentration (ug/Kg)		RPD (Limits)
	102S-2013	112S-2013	
Aroclor-1260	44	61	32 (≤50)

ADAK LTM 2013
Polychlorinated Biphenyls - Data Qualification Summary - SDG K1309212

No Sample Data Qualified in this SDG

ADAK LTM 2013
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG K1309212

No Sample Data Qualified in this SDG

ADAK LTM 2013
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG K1309212

No Sample Data Qualified in this SDG

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Soil

Service Request: K1309212
Date Collected: 09/04/2013
Date Received: 09/06/2013

Polychlorinated Biphenyls (PCBs)

Sample Name: 102S-2013
Lab Code: K1309212-001

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8082A

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	13	5.5	2.7	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1221	ND	U	26	5.5	2.7	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1232	ND	U	13	5.5	2.7	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1242	ND	U	13	5.5	2.7	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1248	ND	U	13	5.5	2.7	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1254	**38**		13	5.5	2.7	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1260	**44**		13	5.5	2.7	1	09/14/13	09/20/13	KWG1310176	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	78	60-125	09/20/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309212
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	09/04/2013
Sample Matrix:	Soil	**Date Received:**	09/06/2013

Polychlorinated Biphenyls (PCBs)

Sample Name:	112S-2013	**Units:**	ug/Kg
Lab Code:	K1309212-002	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	12	4.9	2.4	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1221	ND	U	23	4.9	2.4	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1232	ND	U	12	4.9	2.4	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1242	ND	U	12	4.9	2.4	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1248	ND	U	12	4.9	2.4	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1254	56		12	4.9	2.4	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1260	61		12	4.9	2.4	1	09/14/13	09/20/13	KWG1310176	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	65	60-125	09/20/13	Acceptable

9/17/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Soil

Service Request: K1309212
Date Collected: 09/04/2013
Date Received: 09/06/2013

Polychlorinated Biphenyls (PCBs)

Sample Name: 103S-2013
Lab Code: K1309212-003

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8082A

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	9.9	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1221	ND	U	20	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1232	ND	U	9.9	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1242	ND	U	9.9	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1248	ND	U	9.9	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1254	ND	U	9.9	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1260	ND	U	9.9	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	78	60-125	09/20/13	Acceptable

9/11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Soil

Service Request: K1309212
Date Collected: 09/04/2013
Date Received: 09/06/2013

Polychlorinated Biphenyls (PCBs)

Sample Name: 101S-2013
Lab Code: K1309212-004

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8082A

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	10	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1221	ND	U	20	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1232	ND	U	10	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1242	ND	U	10	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1248	ND	U	10	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1254	ND	U	10	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	
Aroclor 1260	7.2	J	10	4.3	2.1	1	09/14/13	09/20/13	KWG1310176	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	87	60-125	09/20/13	Acceptable

11/7/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 4, 2013
LDC Report Date:	October 15, 2013
Matrix:	Sediment
Parameters:	Metals
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309212

Sample Identification

102S-2013
112S-2013
103S-2013
101S-2013
101S-2013MS
101S-2013MSD

Introduction

This data review covers 6 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6020A for Metals. The metals analyzed were Antimony, Arsenic, and Nickel.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Antimony	0.023 ug/L	All samples in SDG K1309212

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
103S-2013	Antimony	0.036 mg/Kg	0.036U mg/Kg

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
101S-2013MS/MSD (All samples in SDG K1309212)	Antimony	55 (75-125)	58.3 (75-125)	-	J (all detects) UJ (all non-detects)	A

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XII. Sample Result Verification

All sample result verifications were acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples 102S-2013 and 112S-2013 were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)
	102S-2013	112S-2013	
Antimony	3.330	3.030	9 (≤50)
Arsenic	15.6	10.4	40 (≤50)
Nickel	55.8	29.4	62 (≤50)

Adak LTM 2013
Metals - Data Qualification Summary - SDG K1309212

SDG	Sample	Analyte	Flag	A or P	Reason
K1309212	102S-2013 112S-2013 103S-2013 101S-2013	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)

Adak LTM 2013
Metals - Laboratory Blank Data Qualification Summary - SDG K1309212

SDG	Sample	Analyte	Modified Final Concentration	A or P
K1309212	103S-2013	Antimony	0.036U mg/Kg	A

Adak LTM 2013
Metals - Field Blank Data Qualification Summary - SDG K1309212

No Sample Data Qualified in this SDG

Metals
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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309212
Project No.:	14005.066.301	**Date Collected:**	09/04/13
Project Name:	TO 66, Adak LTM 2013	**Date Received:**	09/06/13
Matrix:	SOIL	**Units:**	mg/Kg
		Basis:	DRY

Sample Name: 102S-2013 **Lab Code:** K1309212-001

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.063	0.031	0.011	5.0	09/09/13	09/10/13	3.330	J	J
Arsenic	6020A	0.748	0.187	0.090	5.0	09/10/13	09/11/13	15.6		
Nickel	6020A	0.30	0.15	0.05	5.0	09/10/13	09/11/13	55.8		

% Solids: 39.3

Comments:

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Metals
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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309212
Project No.:	14005.066.301	Date Collected:	09/04/13
Project Name:	TO 66, Adak LTM 2013	Date Received:	09/06/13
Matrix:	SOIL	Units:	mg/Kg
		Basis:	DRY

Sample Name: 112S-2013 Lab Code: K1309212-002

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.057	0.029	0.010	5.0	09/09/13	09/10/13	3.030	J	J
Arsenic	6020A	0.737	0.184	0.088	5.0	09/10/13	09/11/13	10.4		
Nickel	6020A	0.30	0.15	0.04	5.0	09/10/13	09/11/13	29.4		

% Solids: 43.5

Comments:

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ALS Group USA, Corp.
dba ALS Environmental

Metals
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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309212
Project No.:	14005.066.301	Date Collected:	09/04/13
Project Name:	TO 66, Adak LTM 2013	Date Received:	09/06/13
Matrix:	SOIL	Units:	mg/Kg
		Basis:	DRY

Sample Name: 103S-2013 Lab Code: K1309212-003

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.039	0.019	0.007	5.0	09/09/13	09/10/13	0.036	J	~~J~~ UJ
Arsenic	6020A	0.442	0.111	0.053	5.0	09/10/13	09/11/13	2.94		
Nickel	6020A	0.18	0.09	0.03	5.0	09/10/13	09/11/13	4.22		

% Solids: 78.5

Comments:

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Metals
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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309212
Project No.:	14005.066.301	**Date Collected:**	09/04/13
Project Name:	TO 66, Adak LTM 2013	**Date Received:**	09/06/13
Matrix:	SOIL	**Units:**	mg/Kg
		Basis:	DRY

Sample Name: 101S-2013 **Lab Code:** K1309212-004

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.038	0.019	0.007	5.0	09/09/13	09/10/13	0.116	J	J
Arsenic	6020A	0.383	0.096	0.046	5.0	09/10/13	09/11/13	2.90		
Nickel	6020A	0.15	0.08	0.02	5.0	09/10/13	09/11/13	4.52		

% Solids: 63.6

Comments:

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 9 through September 10, 2013
LDC Report Date:	October 30, 2013
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309582

Sample Identification

TB090913C
A-2-2013
A-12-2013
B-1-2013
A-5-2013
A-3-2013
TB090913A
RLSW03-2013
RLSW04-2013
RLSW05-201
B-1-2013MS
B-1-2013MSD

Introduction

This data review covers 12 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/18/13	Chloromethane	22	TB090913C A-5-2013 KWG1310145-3	J (all detects) UJ (all non-detects)	A
9/19/13	Acetone Carbon tetrachloride 1,2-Dibromo-3-chloropropane	21 23 21	RLSW03-2013 RLSW04-2013 RLSW05-2013 KWG1310205-4	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG1310145-3	9/18/13	Methylene chloride	0.30 ug/L	TB090913C A-5-2013
KWG1310205-4	9/19/13	Methylene chloride Tetrachloroethene	0.15 ug/L 0.11 ug/L	RLSW03-2013 RLSW04-2013 RLSW05-2013
KWG1310213-4	9/19/13	Carbon disulfide	0.12 ug/L	A-2-2013 A-12-2013 B-1-2013 A-3-2013 TB090913A

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
TB090913C	Methylene chloride	0.13 ug/L	2.0U ug/L
A-2-2013	Carbon disulfide	0.080 ug/L	0.50U ug/L
A-12-2013	Carbon disulfide	0.080 ug/L	0.50U ug/L
B-1-2013	Carbon disulfide	0.080 ug/L	0.50U ug/L
TB090913A	Carbon disulfide	0.10 ug/L	0.50U ug/L

Samples TB082613C and TB090913A were identified as trip blanks. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples A-2-2013 and A-12-2013 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	A-2-2013	A-12-2013	
Carbon disulfide	0.080	0.080	0 (≤50)

Adak LTM 2013
Volatiles - Data Qualification Summary - SDG K1309582

SDG	Sample	Compound	Flag	A or P	Reason
K1309582	TB090913C A-5-2013	Chloromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K1309582	RLSW03-2013 RLSW04-2013 RLSW05-2013	Acetone Carbon tetrachloride 1,2-Dibromo-3-chloropropane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

Adak LTM 2013
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1309582

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K1309582	TB090913C	Methylene chloride	2.0U ug/L	A
K1309582	A-2-2013	Carbon disulfide	0.50U ug/L	A
K1309582	A-12-2013	Carbon disulfide	0.50U ug/L	A
K1309582	B-1-2013	Carbon disulfide	0.50U ug/L	A
K1309582	TB090913A	Carbon disulfide	0.50U ug/L	A

Adak LTM 2013
Volatiles - Field Blank Data Qualification Summary - SDG K1309582

No Sample Data Qualified in this SDG

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: TB090913C
Lab Code: K1309582-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U UJ	0.50	0.20	0.068	1	09/18/13	09/18/13	KWG1310145	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/18/13	09/18/13	KWG1310145	
Chloroethane	ND	U	0.50	0.20	0.16	1	09/18/13	09/18/13	KWG1310145	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/18/13	09/18/13	KWG1310145	
Acetone	ND	U	20	10	3.3	1	09/18/13	09/18/13	KWG1310145	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	09/18/13	09/18/13	KWG1310145	
Methylene Chloride	0.13	J 2.0U	2.0	0.20	0.10	1	09/18/13	09/18/13	KWG1310145	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/18/13	09/18/13	KWG1310145	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	09/18/13	09/18/13	KWG1310145	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/18/13	09/18/13	KWG1310145	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	09/18/13	09/18/13	KWG1310145	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	09/18/13	09/18/13	KWG1310145	
Benzene	ND	U	0.50	0.10	0.062	1	09/18/13	09/18/13	KWG1310145	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	09/18/13	09/18/13	KWG1310145	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/18/13	09/18/13	KWG1310145	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	09/18/13	09/18/13	KWG1310145	
Toluene	ND	U	0.50	0.10	0.054	1	09/18/13	09/18/13	KWG1310145	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	09/18/13	09/18/13	KWG1310145	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/18/13	09/18/13	KWG1310145	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	09/18/13	09/18/13	KWG1310145	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	09/18/13	09/18/13	KWG1310145	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/18/13	09/18/13	KWG1310145	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/18/13	09/18/13	KWG1310145	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/18/13	09/18/13	KWG1310145	
Styrene	ND	U	0.50	0.20	0.089	1	09/18/13	09/18/13	KWG1310145	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	09/18/13	09/18/13	KWG1310145	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/18/13	09/18/13	KWG1310145	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/18/13	09/18/13	KWG1310145	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	09/18/13	09/18/13	KWG1310145	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	09/18/13	09/18/13	KWG1310145	

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Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: TB090913C
Lab Code: K1309582-001

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	85	85-115	09/18/13	Acceptable
1,2-Dichloroethane-d4	104	70-120	09/18/13	Acceptable
Toluene-d8	91	85-120	09/18/13	Acceptable
4-Bromofluorobenzene	87	75-120	09/18/13	Acceptable

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Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: A-2-2013
Lab Code: K1309582-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	0.50	0.20	0.068	1	09/19/13	09/19/13	KWG1310213	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/19/13	09/19/13	KWG1310213	
Chloroethane	ND	U	0.50	0.20	0.16	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/19/13	09/19/13	KWG1310213	
Acetone	ND	U	20	10	3.3	1	09/19/13	09/19/13	KWG1310213	*
Carbon Disulfide	**0.080**	J 0.50U	0.50	0.20	0.069	1	09/19/13	09/19/13	KWG1310213	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	09/19/13	09/19/13	KWG1310213	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/19/13	09/19/13	KWG1310213	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	09/19/13	09/19/13	KWG1310213	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	09/19/13	09/19/13	KWG1310213	*
Benzene	ND	U	0.50	0.10	0.062	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	09/19/13	09/19/13	KWG1310213	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	09/19/13	09/19/13	KWG1310213	
Toluene	ND	U	0.50	0.10	0.054	1	09/19/13	09/19/13	KWG1310213	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	09/19/13	09/19/13	KWG1310213	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/19/13	09/19/13	KWG1310213	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310213	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/19/13	09/19/13	KWG1310213	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310213	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/19/13	09/19/13	KWG1310213	
Styrene	ND	U	0.50	0.20	0.089	1	09/19/13	09/19/13	KWG1310213	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310213	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	09/19/13	09/19/13	KWG1310213	*
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	09/19/13	09/19/13	KWG1310213	

* See Case Narrative

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: A-2-2013
Lab Code: K1309582-002

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	09/19/13	Acceptable
1,2-Dichloroethane-d4	93	70-120	09/19/13	Acceptable
Toluene-d8	97	85-120	09/19/13	Acceptable
4-Bromofluorobenzene	97	75-120	09/19/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: A-12-2013
Lab Code: K1309582-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	0.50	0.20	0.068	1	09/19/13	09/19/13	KWG1310213	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/19/13	09/19/13	KWG1310213	
Chloroethane	ND	U	0.50	0.20	0.16	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/19/13	09/19/13	KWG1310213	
Acetone	ND	U	20	10	3.3	1	09/19/13	09/19/13	KWG1310213	*
Carbon Disulfide	**0.080**	J 0.50U	0.50	0.20	0.069	1	09/19/13	09/19/13	KWG1310213	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	09/19/13	09/19/13	KWG1310213	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/19/13	09/19/13	KWG1310213	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	09/19/13	09/19/13	KWG1310213	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	09/19/13	09/19/13	KWG1310213	*
Benzene	ND	U	0.50	0.10	0.062	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	09/19/13	09/19/13	KWG1310213	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	09/19/13	09/19/13	KWG1310213	
Toluene	ND	U	0.50	0.10	0.054	1	09/19/13	09/19/13	KWG1310213	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	09/19/13	09/19/13	KWG1310213	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/19/13	09/19/13	KWG1310213	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310213	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/19/13	09/19/13	KWG1310213	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310213	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/19/13	09/19/13	KWG1310213	
Styrene	ND	U	0.50	0.20	0.089	1	09/19/13	09/19/13	KWG1310213	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310213	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	09/19/13	09/19/13	KWG1310213	*
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	09/19/13	09/19/13	KWG1310213	

* See Case Narrative

11/7/17

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: A-12-2013
Lab Code: K1309582-003

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	09/19/13	Acceptable
1,2-Dichloroethane-d4	90	70-120	09/19/13	Acceptable
Toluene-d8	94	85-120	09/19/13	Acceptable
4-Bromofluorobenzene	97	75-120	09/19/13	Acceptable

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: B-1-2013
Lab Code: K1309582-004

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	0.50	0.20	0.068	1	09/19/13	09/19/13	KWG1310213	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/19/13	09/19/13	KWG1310213	
Chloroethane	ND	U	0.50	0.20	0.16	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/19/13	09/19/13	KWG1310213	
Acetone	ND	U	20	10	3.3	1	09/19/13	09/19/13	KWG1310213	*
Carbon Disulfide	**0.080**	J 0.50U	0.50	0.20	0.069	1	09/19/13	09/19/13	KWG1310213	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	09/19/13	09/19/13	KWG1310213	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/19/13	09/19/13	KWG1310213	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	09/19/13	09/19/13	KWG1310213	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	09/19/13	09/19/13	KWG1310213	*
Benzene	ND	U	0.50	0.10	0.062	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	09/19/13	09/19/13	KWG1310213	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	09/19/13	09/19/13	KWG1310213	
Toluene	ND	U	0.50	0.10	0.054	1	09/19/13	09/19/13	KWG1310213	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	09/19/13	09/19/13	KWG1310213	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/19/13	09/19/13	KWG1310213	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310213	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/19/13	09/19/13	KWG1310213	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310213	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/19/13	09/19/13	KWG1310213	
Styrene	ND	U	0.50	0.20	0.089	1	09/19/13	09/19/13	KWG1310213	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310213	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	09/19/13	09/19/13	KWG1310213	*
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	09/19/13	09/19/13	KWG1310213	

* See Case Narrative

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: B-1-2013
Lab Code: K1309582-004

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	09/19/13	Acceptable
1,2-Dichloroethane-d4	89	70-120	09/19/13	Acceptable
Toluene-d8	95	85-120	09/19/13	Acceptable
4-Bromofluorobenzene	97	75-120	09/19/13	Acceptable

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: A-5-2013
Lab Code: K1309582-005

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	UJ	0.50	0.20	0.068	1	09/18/13	09/18/13	KWG1310145	
Vinyl Chloride	ND	U		0.50	0.10	0.075	1	09/18/13	09/18/13	KWG1310145	
Chloroethane	ND	U		0.50	0.20	0.16	1	09/18/13	09/18/13	KWG1310145	
1,1-Dichloroethene	ND	U		0.50	0.20	0.080	1	09/18/13	09/18/13	KWG1310145	
Acetone	ND	U		20	10	3.3	1	09/18/13	09/18/13	KWG1310145	
Carbon Disulfide	ND	U		0.50	0.20	0.069	1	09/18/13	09/18/13	KWG1310145	
Methylene Chloride	ND	U		2.0	0.20	0.10	1	09/18/13	09/18/13	KWG1310145	
trans-1,2-Dichloroethene	ND	U		0.50	0.20	0.072	1	09/18/13	09/18/13	KWG1310145	
1,1-Dichloroethane	ND	U		0.50	0.20	0.077	1	09/18/13	09/18/13	KWG1310145	
cis-1,2-Dichloroethene	ND	U		0.50	0.20	0.067	1	09/18/13	09/18/13	KWG1310145	
1,1,1-Trichloroethane (TCA)	ND	U		0.50	0.20	0.075	1	09/18/13	09/18/13	KWG1310145	
Carbon Tetrachloride	ND	U		0.50	0.20	0.096	1	09/18/13	09/18/13	KWG1310145	
Benzene	ND	U		0.50	0.10	0.062	1	09/18/13	09/18/13	KWG1310145	
1,2-Dichloroethane (EDC)	ND	U		0.50	0.15	0.080	1	09/18/13	09/18/13	KWG1310145	
Trichloroethene (TCE)	ND	U		0.50	0.10	0.10	1	09/18/13	09/18/13	KWG1310145	
1,2-Dichloropropane	ND	U		0.50	0.20	0.095	1	09/18/13	09/18/13	KWG1310145	
Toluene	ND	U		0.50	0.10	0.054	1	09/18/13	09/18/13	KWG1310145	
1,1,2-Trichloroethane	ND	U		0.50	0.40	0.14	1	09/18/13	09/18/13	KWG1310145	
Tetrachloroethene (PCE)	ND	U		0.50	0.20	0.099	1	09/18/13	09/18/13	KWG1310145	
1,2-Dibromoethane (EDB)	ND	U		2.0	0.20	0.10	1	09/18/13	09/18/13	KWG1310145	
Chlorobenzene	ND	U		0.50	0.20	0.11	1	09/18/13	09/18/13	KWG1310145	
Ethylbenzene	ND	U		0.50	0.10	0.050	1	09/18/13	09/18/13	KWG1310145	
m,p-Xylenes	ND	U		0.50	0.20	0.11	1	09/18/13	09/18/13	KWG1310145	
o-Xylene	ND	U		0.50	0.20	0.074	1	09/18/13	09/18/13	KWG1310145	
Styrene	ND	U		0.50	0.20	0.089	1	09/18/13	09/18/13	KWG1310145	
1,3-Dichlorobenzene	ND	U		0.50	0.20	0.10	1	09/18/13	09/18/13	KWG1310145	
1,4-Dichlorobenzene	ND	U		0.50	0.20	0.12	1	09/18/13	09/18/13	KWG1310145	
1,2-Dichlorobenzene	ND	U		0.50	0.20	0.12	1	09/18/13	09/18/13	KWG1310145	
1,2-Dibromo-3-chloropropane	ND	U		2.0	0.80	0.20	1	09/18/13	09/18/13	KWG1310145	
1,2,4-Trichlorobenzene	ND	U		2.0	0.30	0.096	1	09/18/13	09/18/13	KWG1310145	

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: A-5-2013
Lab Code: K1309582-005

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	85	85-115	09/18/13	Acceptable
1,2-Dichloroethane-d4	102	70-120	09/18/13	Acceptable
Toluene-d8	91	85-120	09/18/13	Acceptable
4-Bromofluorobenzene	87	75-120	09/18/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/10/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: A-3-2013
Lab Code: K1309582-006

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	0.50	0.20	0.068	1	09/19/13	09/19/13	KWG1310213	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/19/13	09/19/13	KWG1310213	
Chloroethane	ND	U	0.50	0.20	0.16	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/19/13	09/19/13	KWG1310213	
Acetone	ND	U	20	10	3.3	1	09/19/13	09/19/13	KWG1310213	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	09/19/13	09/19/13	KWG1310213	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	09/19/13	09/19/13	KWG1310213	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/19/13	09/19/13	KWG1310213	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	09/19/13	09/19/13	KWG1310213	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	09/19/13	09/19/13	KWG1310213	*
Benzene	ND	U	0.50	0.10	0.062	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	09/19/13	09/19/13	KWG1310213	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	09/19/13	09/19/13	KWG1310213	
Toluene	ND	U	0.50	0.10	0.054	1	09/19/13	09/19/13	KWG1310213	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	09/19/13	09/19/13	KWG1310213	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/19/13	09/19/13	KWG1310213	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310213	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/19/13	09/19/13	KWG1310213	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310213	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/19/13	09/19/13	KWG1310213	
Styrene	ND	U	0.50	0.20	0.089	1	09/19/13	09/19/13	KWG1310213	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310213	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	09/19/13	09/19/13	KWG1310213	*
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	09/19/13	09/19/13	KWG1310213	

* See Case Narrative

9/17/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/10/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: A-3-2013
Lab Code: K1309582-006

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	09/19/13	Acceptable
1,2-Dichloroethane-d4	88	70-120	09/19/13	Acceptable
Toluene-d8	93	85-120	09/19/13	Acceptable
4-Bromofluorobenzene	98	75-120	09/19/13	Acceptable

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: TB090913A
Lab Code: K1309582-009

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	0.50	0.20	0.068	1	09/19/13	09/19/13	KWG1310213	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/19/13	09/19/13	KWG1310213	
Chloroethane	ND	U	0.50	0.20	0.16	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/19/13	09/19/13	KWG1310213	
Acetone	ND	U	20	10	3.3	1	09/19/13	09/19/13	KWG1310213	*
Carbon Disulfide	**0.10**	J 0.50U	0.50	0.20	0.069	1	09/19/13	09/19/13	KWG1310213	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	09/19/13	09/19/13	KWG1310213	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/19/13	09/19/13	KWG1310213	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	09/19/13	09/19/13	KWG1310213	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	09/19/13	09/19/13	KWG1310213	*
Benzene	ND	U	0.50	0.10	0.062	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	09/19/13	09/19/13	KWG1310213	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	09/19/13	09/19/13	KWG1310213	
Toluene	ND	U	0.50	0.10	0.054	1	09/19/13	09/19/13	KWG1310213	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	09/19/13	09/19/13	KWG1310213	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/19/13	09/19/13	KWG1310213	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310213	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/19/13	09/19/13	KWG1310213	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310213	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/19/13	09/19/13	KWG1310213	
Styrene	ND	U	0.50	0.20	0.089	1	09/19/13	09/19/13	KWG1310213	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	09/19/13	09/19/13	KWG1310213	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310213	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310213	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	09/19/13	09/19/13	KWG1310213	*
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	09/19/13	09/19/13	KWG1310213	

* See Case Narrative

11/7/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309582
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Volatile Organic Compounds

Sample Name:	TB090913A	**Units:**	ug/L
Lab Code:	K1309582-009	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	85-115	09/19/13	Acceptable
1,2-Dichloroethane-d4	89	70-120	09/19/13	Acceptable
Toluene-d8	94	85-120	09/19/13	Acceptable
4-Bromofluorobenzene	97	75-120	09/19/13	Acceptable

11/7/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: RLSW03-2013
Lab Code: K1309582-011

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	0.50	0.20	0.068	1	09/19/13	09/19/13	KWG1310205	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/19/13	09/19/13	KWG1310205	
Chloroethane	ND	U	0.50	0.20	0.16	1	09/19/13	09/19/13	KWG1310205	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/19/13	09/19/13	KWG1310205	
Acetone	ND	U UJ	20	10	3.3	1	09/19/13	09/19/13	KWG1310205	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	09/19/13	09/19/13	KWG1310205	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310205	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/19/13	09/19/13	KWG1310205	
1,1-Dichloroethane	**0.11**	J	0.50	0.20	0.077	1	09/19/13	09/19/13	KWG1310205	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/19/13	09/19/13	KWG1310205	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	09/19/13	09/19/13	KWG1310205	
Carbon Tetrachloride	ND	U UJ	0.50	0.20	0.096	1	09/19/13	09/19/13	KWG1310205	
Benzene	ND	U	0.50	0.10	0.062	1	09/19/13	09/19/13	KWG1310205	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	09/19/13	09/19/13	KWG1310205	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/19/13	09/19/13	KWG1310205	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	09/19/13	09/19/13	KWG1310205	
Toluene	ND	U	0.50	0.10	0.054	1	09/19/13	09/19/13	KWG1310205	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	09/19/13	09/19/13	KWG1310205	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/19/13	09/19/13	KWG1310205	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310205	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310205	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/19/13	09/19/13	KWG1310205	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310205	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/19/13	09/19/13	KWG1310205	
Styrene	ND	U	0.50	0.20	0.089	1	09/19/13	09/19/13	KWG1310205	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	09/19/13	09/19/13	KWG1310205	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310205	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310205	
1,2-Dibromo-3-chloropropane	ND	U UJ	2.0	0.80	0.20	1	09/19/13	09/19/13	KWG1310205	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	09/19/13	09/19/13	KWG1310205	

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: RLSW03-2013
Lab Code: K1309582-011

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	09/19/13	Acceptable
1,2-Dichloroethane-d4	96	70-120	09/19/13	Acceptable
Toluene-d8	98	85-120	09/19/13	Acceptable
4-Bromofluorobenzene	91	75-120	09/19/13	Acceptable

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Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: RLSW04-2013
Lab Code: K1309582-013

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	0.50	0.20	0.068	1	09/19/13	09/19/13	KWG1310205	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/19/13	09/19/13	KWG1310205	
Chloroethane	ND	U	0.50	0.20	0.16	1	09/19/13	09/19/13	KWG1310205	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/19/13	09/19/13	KWG1310205	
Acetone	ND	U UJ	20	10	3.3	1	09/19/13	09/19/13	KWG1310205	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	09/19/13	09/19/13	KWG1310205	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310205	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/19/13	09/19/13	KWG1310205	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	09/19/13	09/19/13	KWG1310205	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/19/13	09/19/13	KWG1310205	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	09/19/13	09/19/13	KWG1310205	
Carbon Tetrachloride	ND	U UJ	0.50	0.20	0.096	1	09/19/13	09/19/13	KWG1310205	
Benzene	ND	U	0.50	0.10	0.062	1	09/19/13	09/19/13	KWG1310205	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	09/19/13	09/19/13	KWG1310205	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/19/13	09/19/13	KWG1310205	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	09/19/13	09/19/13	KWG1310205	
Toluene	ND	U	0.50	0.10	0.054	1	09/19/13	09/19/13	KWG1310205	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	09/19/13	09/19/13	KWG1310205	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/19/13	09/19/13	KWG1310205	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310205	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310205	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/19/13	09/19/13	KWG1310205	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310205	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/19/13	09/19/13	KWG1310205	
Styrene	ND	U	0.50	0.20	0.089	1	09/19/13	09/19/13	KWG1310205	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	09/19/13	09/19/13	KWG1310205	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310205	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310205	
1,2-Dibromo-3-chloropropane	ND	U UJ	2.0	0.80	0.20	1	09/19/13	09/19/13	KWG1310205	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	09/19/13	09/19/13	KWG1310205	

11/7/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: RLSW04-2013
Lab Code: K1309582-013

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	09/19/13	Acceptable
1,2-Dichloroethane-d4	96	70-120	09/19/13	Acceptable
Toluene-d8	99	85-120	09/19/13	Acceptable
4-Bromofluorobenzene	95	75-120	09/19/13	Acceptable

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Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: RLSW05-2013
Lab Code: K1309582-014

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	0.50	0.20	0.068	1	09/19/13	09/19/13	KWG1310205	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/19/13	09/19/13	KWG1310205	
Chloroethane	ND	U	0.50	0.20	0.16	1	09/19/13	09/19/13	KWG1310205	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/19/13	09/19/13	KWG1310205	
Acetone	ND	U UJ	20	10	3.3	1	09/19/13	09/19/13	KWG1310205	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	09/19/13	09/19/13	KWG1310205	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310205	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/19/13	09/19/13	KWG1310205	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	09/19/13	09/19/13	KWG1310205	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/19/13	09/19/13	KWG1310205	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	09/19/13	09/19/13	KWG1310205	
Carbon Tetrachloride	ND	U UJ	0.50	0.20	0.096	1	09/19/13	09/19/13	KWG1310205	
Benzene	ND	U	0.50	0.10	0.062	1	09/19/13	09/19/13	KWG1310205	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	09/19/13	09/19/13	KWG1310205	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/19/13	09/19/13	KWG1310205	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	09/19/13	09/19/13	KWG1310205	
Toluene	ND	U	0.50	0.10	0.054	1	09/19/13	09/19/13	KWG1310205	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	09/19/13	09/19/13	KWG1310205	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/19/13	09/19/13	KWG1310205	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	09/19/13	09/19/13	KWG1310205	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310205	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/19/13	09/19/13	KWG1310205	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/19/13	09/19/13	KWG1310205	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/19/13	09/19/13	KWG1310205	
Styrene	ND	U	0.50	0.20	0.089	1	09/19/13	09/19/13	KWG1310205	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	09/19/13	09/19/13	KWG1310205	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310205	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	09/19/13	09/19/13	KWG1310205	
1,2-Dibromo-3-chloropropane	ND	U UJ	2.0	0.80	0.20	1	09/19/13	09/19/13	KWG1310205	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	09/19/13	09/19/13	KWG1310205	

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Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309582
Date Collected: 09/09/2013
Date Received: 09/13/2013

Volatile Organic Compounds

Sample Name: RLSW05-2013
Lab Code: K1309582-014

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	09/19/13	Acceptable
1,2-Dichloroethane-d4	97	70-120	09/19/13	Acceptable
Toluene-d8	100	85-120	09/19/13	Acceptable
4-Bromofluorobenzene	92	75-120	09/19/13	Acceptable

11/7/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2013

Collection Date: September 9 through September 10, 2013

LDC Report Date: October 15, 2013

Matrix: Water

Parameters: Metals

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1309582

Sample Identification

A-2-2013
A-12-2013
B-1-2013
A-5-2013
A-3-2013
NL-14-2013
RLSW03-2013
RLSW04-2013
RLSW05-2013
NL-11-2013
NL-12-2013
A-2-2013F
A-12-2013F
B-1-2013F
A-5-2013F
A-3-2013F
NL-14-2013F
RLSW03-2013F
RLSW04-2013F
RLSW05-2013F
NL-11-2013F
NL-12-2013F
B-1-2013MS
B-1-2013MSD
B-1-2013FMS
B-1-2013FMSD

Samples appended with "F" were analyzed for dissolved metals

Introduction

This data review covers 26 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6020A and 7470A for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Aluminum Beryllium Cadmium Chromium	0.3 ug/L 0.005 ug/L 0.008 ug/L 0.10 ug/L	A-2-2013 A-12-2013 B-1-2013 A-5-2013 A-3-2013 NL-14-2013 RLSW03-2013 RLSW04-2013 RLSW05-2013 NL-11-2013 NL-12-2013
PB (prep blank)	Aluminum	0.6 ug/L	A-2-2013F A-12-2013F B-1-2013F A-5-2013F A-3-2013F NL-14-2013F RLSW03-2013F RLSW04-2013F RLSW05-2013F NL-11-2013F NL-12-2013F
ICB/CCB	Beryllium Cadmium Chromium	0.005 ug/L 0.003 ug/L 0.04 ug/L	A-2-2013 A-12-2013 B-1-2013 A-5-2013

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Beryllium	0.006 ug/L	A-3-2013 NL-14-2013 RLSW03-2013 RLSW04-2013 RLSW05-2013 NL-11-2013 NL-12-2013 A-2-2013F A-12-2013F B-1-2013F A-5-2013F A-3-2013F NL-14-2013F
ICB/CCB	Cadmium Lead	0.005 ug/L 0.005 ug/L	A-3-2013 NL-14-2013 RLSW03-2013 RLSW04-2013 RLSW05-2013 NL-11-2013 NL-12-2013
ICB/CCB	Cadmium Lead Silver	0.010 ug/L 0.007 ug/L 0.010 ug/L	A-2-2013F A-12-2013F B-1-2013F A-5-2013F A-3-2013F NL-14-2013F
ICB/CCB	Silver	0.008 ug/L	A-2-2013 A-12-2013 B-1-2013 A-5-2013 A-3-2013 NL-14-2013 RLSW03-2013 RLSW04-2013 RLSW05-2013 NL-11-2013 NL-12-2013
ICB/CCB	Thallium	0.007 ug/L	A-2-2013 A-12-2013 B-1-2013 A-5-2013 A-3-2013 NL-14-2013 RLSW03-2013 RLSW04-2013 RLSW05-2013 NL-11-2013 NL-12-2013 A-2-2013F A-12-2013F B-1-2013F A-5-2013F A-3-2013F NL-14-2013F

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Antimony Beryllium Silver Thallium	0.02 ug/L 0.004 ug/L 0.009 ug/L 0.008 ug/L	RLSW03-2013F RLSW04-2013F RLSW05-2013F NL-11-2013F NL-12-2013F

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
A-2-2013	Beryllium Cadmium Chromium Silver Thallium	0.009 ug/L 0.017 ug/L 0.12 ug/L 0.011 ug/L 0.008 ug/L	0.009U ug/L 0.017U ug/L 0.12U ug/L 0.011U ug/L 0.008U ug/L
A-12-2013	Beryllium Cadmium Chromium Thallium	0.008 ug/L 0.013 ug/L 0.11 ug/L 0.003 ug/L	0.008U ug/L 0.013U ug/L 0.11U ug/L 0.003U ug/L
B-1-2013	Chromium Silver	0.04 ug/L 0.007 ug/L	0.04U ug/L 0.007U ug/L
A-5-2013	Beryllium Cadmium Chromium Thallium	0.006 ug/L 0.011 ug/L 0.32 ug/L 0.008 ug/L	0.006U ug/L 0.011U ug/L 0.32U ug/L 0.008U ug/L
A-3-2013	Beryllium Cadmium Silver Thallium	0.010 ug/L 0.032 ug/L 0.008 ug/L 0.010 ug/L	0.010U ug/L 0.032U ug/L 0.008U ug/L 0.010U ug/L
NL-14-2013	Beryllium Chromium Thallium	0.007 ug/L 0.05 ug/L 0.005 ug/L	0.007U ug/L 0.05U ug/L 0.005U ug/L
RLSW03-2013	Thallium	0.022 ug/L	0.022U ug/L
RLSW04-2013	Cadmium Chromium	0.004 ug/L 0.11 ug/L	0.004U ug/L 0.11U ug/L
RLSW05-2013	Cadmium Thallium	0.021 ug/L 0.007 ug/L	0.021U ug/L 0.007U ug/L

Sample	Analyte	Reported Concentration	Modified Final Concentration
NL-11-2013	Beryllium Thallium	0.005 ug/L 0.012 ug/L	0.005U ug/L 0.012U ug/L
NL-12-2013	Cadmium Chromium	0.008 ug/L 0.06 ug/L	0.008U ug/L 0.06U ug/L
A-2-2013F	Beryllium Cadmium Silver Thallium	0.005 ug/L 0.015 ug/L 0.004 ug/L 0.007 ug/L	0.005U ug/L 0.015U ug/L 0.004U ug/L 0.007U ug/L
A-12-2013F	Beryllium Cadmium Thallium	0.004 ug/L 0.012 ug/L 0.002 ug/L	0.004U ug/L 0.012U ug/L 0.002U ug/L
B-1-2013F	Silver	0.006 ug/L	0.006U ug/L
A-5-2013F	Aluminum Cadmium Thallium	2.6 ug/L 0.005 ug/L 0.006 ug/L	2.6U ug/L 0.005U ug/L 0.006U ug/L
A-3-2013F	Beryllium Cadmium Thallium	0.005 ug/L 0.031 ug/L 0.009 ug/L	0.005U ug/L 0.031U ug/L 0.009U ug/L
NL-14-2013F	Aluminum Thallium	2.4 ug/L 0.003 ug/L	2.4U ug/L 0.003U ug/L
RLSW03-2013F	Silver Thallium	0.014 ug/L 0.022 ug/L	0.014U ug/L 0.022U ug/L
RLSW04-2013F	Beryllium Silver	0.010 ug/L 0.004 ug/L	0.010U ug/L 0.004U ug/L
RLSW05-2013F	Beryllium Silver Thallium	0.012 ug/L 0.006 ug/L 0.004 ug/L	0.012U ug/L 0.006U ug/L 0.004U ug/L
NL-11-2013F	Aluminum Antimony Beryllium Thallium	2.8 ug/L 0.04 ug/L 0.012 ug/L 0.012 ug/L	2.8U ug/L 0.04U ug/L 0.012U ug/L 0.012U ug/L
NL-12-2013F	Antimony Beryllium	0.10 ug/L 0.008 ug/L	0.10U ug/L 0.008U ug/L

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
B-1-2013	Copper	11 (≤10)	A-2-2013 A-12-2013	J (all detects) UJ (all non-detects)	A
	Nickel	11 (≤10)	B-1-2013 A-5-2013 A-3-2013 NL-14-2013 RLSW03-2013 RLSW04-2013 RLSW05-2013 NL-11-2013 NL-12-2013	J (all detects) UJ (all non-detects)	

XII. Sample Result Verification

All sample result verifications were acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples A-2-2013 and A-12-2013 and samples A-2-2013F and A-12-2013F were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Analyte	Concentration (ug/L)		RPD (Limits)
	A-2-2013	A-12-2013	
Aluminum	41.7	42.0	1 (≤50)
Antimony	0.03	0.02U	Not calculable
Arsenic	1.6	1.6	0 (≤50)
Beryllium	0.009	0.008	12 (≤50)
Cadmium	0.017	0.013	27 (≤50)
Chromium	0.12	0.11	9 (≤50)
Copper	0.87	0.82	6 (≤50)
Lead	0.083	0.084	1 (≤50)
Nickel	2.49	2.53	2 (≤50)
Selenium	0.5	0.3	50 (≤50)
Silver	0.011	0.004U	Not calculable
Thallium	0.008	0.003	91 (≤50)
Zinc	4.59	4.37	5 (≤50)

Analyte	Concentration (ug/L)		RPD (Limits)
	A-2-2013F	A-12-2013F	
Aluminum	4.3	4.4	2 (≤50)
Antimony	0.03	0.02U	Not calculable

Analyte	Concentration (ug/L)		RPD (Limits)
	A-2-2013F	A-12-2013F	
Arsenic	1.5	1.4	7 (≤50)
Beryllium	0.005	0.004	22 (≤50)
Cadmium	0.015	0.012	22 (≤50)
Chromium	0.05	0.04U	Not calculable
Copper	0.25	0.29	15 (≤50)
Lead	0.014	0.014	0 (≤50)
Nickel	2.06	2.03	1 (≤50)
Selenium	0.3	0.3U	Not calculable
Silver	0.004	0.004U	Not calculable
Thallium	0.007	0.002	111 (≤50)
Zinc	4.26	4.44	4 (≤50)

Adak LTM 2013
Metals - Data Qualification Summary - SDG K1309582

SDG	Sample	Analyte	Flag	A or P	Reason
K1309582	A-2-2013 A-12-2013 B-1-2013 A-5-2013 A-3-2013 NL-14-2013 RLSW03-2013 RLSW04-2013 RLSW05-2013 NL-11-2013 NL-12-2013	Copper Nickel	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D)

Adak LTM 2013
Metals - Laboratory Blank Data Qualification Summary - SDG K1309582

SDG	Sample	Analyte	Modified Final Concentration	A or P
K1309582	A-2-2013	Beryllium Cadmium Chromium Silver Thallium	0.009U ug/L 0.017U ug/L 0.12U ug/L 0.011U ug/L 0.008U ug/L	A
K1309582	A-12-2013	Beryllium Cadmium Chromium Thallium	0.008U ug/L 0.013U ug/L 0.11U ug/L 0.003U ug/L	A
K1309582	B-1-2013	Chromium Silver	0.04U ug/L 0.007U ug/L	A
K1309582	A-5-2013	Beryllium Cadmium Chromium Thallium	0.006U ug/L 0.011U ug/L 0.32U ug/L 0.008U ug/L	A
K1309582	A-3-2013	Beryllium Cadmium Silver Thallium	0.010U ug/L 0.032U ug/L 0.008U ug/L 0.010U ug/L	A
K1309582	NL-14-2013	Beryllium Chromium Thallium	0.007U ug/L 0.05U ug/L 0.005U ug/L	A
K1309582	RLSW03-2013	Thallium	0.022U ug/L	A
K1309582	RLSW04-2013	Cadmium Chromium	0.004U ug/L 0.11U ug/L	A

SDG	Sample	Analyte	Modified Final Concentration	A or P
K1309582	RLSW05-2013	Cadmium Thallium	0.021U ug/L 0.007U ug/L	A
K1309582	NL-11-2013	Beryllium Thallium	0.005U ug/L 0.012U ug/L	A
K1309582	NL-12-2013	Cadmium Chromium	0.008U ug/L 0.06U ug/L	A
K1309582	A-2-2013F	Beryllium Cadmium Silver Thallium	0.005U ug/L 0.015U ug/L 0.004U ug/L 0.007U ug/L	A
K1309582	A-12-2013F	Beryllium Cadmium Thallium	0.004U ug/L 0.012U ug/L 0.002U ug/L	A
K1309582	B-1-2013F	Silver	0.006U ug/L	A
K1309582	A-5-2013F	Aluminum Cadmium Thallium	2.6U ug/L 0.005U ug/L 0.006U ug/L	A
K1309582	A-3-2013F	Beryllium Cadmium Thallium	0.005U ug/L 0.031U ug/L 0.009U ug/L	A
K1309582	NL-14-2013F	Aluminum Thallium	2.4U ug/L 0.003U ug/L	A
K1309582	RLSW03-2013F	Silver Thallium	0.014U ug/L 0.022U ug/L	A
K1309582	RLSW04-2013F	Beryllium Silver	0.010U ug/L 0.004U ug/L	A
K1309582	RLSW05-2013F	Beryllium Silver Thallium	0.012U ug/L 0.006U ug/L 0.004U ug/L	A
K1309582	NL-11-2013F	Aluminum Antimony Beryllium Thallium	2.8U ug/L 0.04U ug/L 0.012U ug/L 0.012U ug/L	A
K1309582	NL-12-2013F	Antimony Beryllium	0.10U ug/L 0.008U ug/L	A

Adak LTM 2013
Metals - Field Blank Data Qualification Summary - SDG K1309582

No Sample Data Qualified in this SDG

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: A-2-2013 Lab Code: K1309582-002

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/23/13	41.7		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.03	J	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	1.6		
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.009	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.017	J	U
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/23/13	0.12	J	U
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	0.87		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.083		
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	2.49		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	0.5	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.011	J	U
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.008	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	4.59		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: A-12-2013 Lab Code: K1309582-003

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/23/13	42.0		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	1.6		
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.008	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.013	J	U
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/23/13	0.11	J	U
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	0.82		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.084		
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	2.53		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	0.3	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.003	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	4.37		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309582
Project No.:	14005.066.301	**Date Collected:**	09/09/13
Project Name:	TO66 Adak LTM 2013	**Date Received:**	09/13/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: B-1-2013 **Lab Code:** K1309582-004

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	40.0	20.0	6.0	20.0	09/17/13	09/24/13	999		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	0.17	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.055		
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.130		
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/23/13	0.04	J	U
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	28.1		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.024	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	3.87		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	0.6	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.007	J	U
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.062		
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	17.37		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: A-5-2013 Lab Code: K1309582-005

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/23/13	163		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	0.48	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.006	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.011	J	U
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/23/13	0.32		U
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	6.82		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.081		
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	2.28		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	0.4	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.008	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	4.68		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/10/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: A-3-2013 Lab Code: K1309582-006

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	40.0	20.0	6.0	20.0	09/17/13	09/24/13	508		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.04	J	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	0.10	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.010	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.032		U
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	1.01		
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	56.9		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.072		
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	5.20		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	0.7	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.008	J	U
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.010	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	3.62		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: NL-14-2013 Lab Code: K1309582-010

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	180		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	0.62		
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.007	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.140		
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.05	J	U
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	17.5		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.272		
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	2.48		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	1.4	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.005	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	41.90		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: RLSW03-2013 Lab Code: K1309582-011

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	40.0	20.0	6.0	20.0	09/17/13	09/24/13	1410		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	0.20	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.031		
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.046		
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.05	U	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	70.4		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.460		
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	2.68		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	0.9	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.022	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	11.46		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: RLSW04-2013 Lab Code: K1309582-013

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	26.9		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.19		
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	0.17	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.010	U	
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.004	J	U
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.11	J	U
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	1.98		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.099		
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	0.76		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	0.3	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.005	U	
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	1.68		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: RLSW05-2013 Lab Code: K1309582-014

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	12.9		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.16		
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	0.15	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.010	U	
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.021	J	U
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.05	U	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	25.2		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.006	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	1.32		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	0.7	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.007	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	4.30		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/10/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: NL-11-2013 Lab Code: K1309582-015

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	21.3		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.07		
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	0.17	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.005	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.042		
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.05	U	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	31.4		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.007	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	1.86		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	0.6	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.012	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	10.02		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/10/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: NL-12-2013 Lab Code: K1309582-016

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	38.0		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/23/13	0.12		
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/23/13	0.16	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.010	U	
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/23/13	0.008	J	U
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.06	J	U
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/23/13	1.90		J
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/23/13	0.073		
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/23/13	0.63		J
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/23/13	0.4	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/23/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/23/13	0.005	U	
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/23/13	3.95		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: A-2-2013 Lab Code: K1309582-002DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	4.3		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.03	J	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	1.5		
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.005	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.015	J	U
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.05	J	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	0.25		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.014	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	2.06		
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/24/13	0.3	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.004	J	U
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.007	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	4.26		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: A-12-2013 Lab Code: K1309582-003DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	4.4		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	1.4		
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.004	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.012	J	U
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.05	U	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	0.29		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.014	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	2.03		
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/24/13	0.5	U	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.002	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	4.44		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: B-1-2013 Lab Code: K1309582-004DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	40.0	20.0	6.0	20.0		09/24/13	940		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	0.14	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.057		
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.116		
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.05	U	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	27.0		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.012	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	3.71		
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/24/13	0.3	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.006	J	U
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.054		
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	16.66		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: A-5-2013 Lab Code: K1309582-005DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	2.6		u
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	0.25	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.010	U	
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.005	J	u
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.05	U	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	0.52		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.009	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	2.05		
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/24/13	0.4	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.006	J	u
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	4.49		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/10/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: A-3-2013 Lab Code: K1309582-006DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	20.0	10.0	3.0	10.0	09/17/13	09/25/13	261		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	0.10	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.005	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.031		U
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.35		
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	44.8		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.026	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	5.15		
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/24/13	0.6	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.009	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	3.49		

Comments:

11/7/13

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: NL-14-2013 Lab Code: K1309582-010DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	2.4		U
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	0.39	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.010	U	
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.063		
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.20	J	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	2.21		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.013	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	2.38		
Selenium	6020A	1.5	0.5	0.3	1.0	09/17/13	09/24/13	1.2	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.003	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	30.19		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: RLSW03-2013 Lab Code: K1309582-011DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	40.0	20.0	6.0	20.0	09/17/13	09/24/13	356		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.05	U	
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	0.12	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.033		
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.056		
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.06	J	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	77.5		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.454		
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	3.17		
Selenium	6020A	1.5	0.5	0.2	1.0	09/17/13	09/24/13	0.5	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.014	J	u
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.022	J	u
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	12.25		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/09/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: RLSW04-2013 Lab Code: K1309582-013DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	15.4		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.17		
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	0.13	U	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.010	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.006	J	
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.13	J	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	2.06		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.051		
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	0.88		
Selenium	6020A	1.5	0.5	0.2	1.0	09/17/13	09/24/13	0.4	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.004	J	U
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.005	U	
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	2.49		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309582
Project No.:	14005.066.301	**Date Collected:**	09/09/13
Project Name:	TO66 Adak LTM 2013	**Date Received:**	09/13/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: RLSW05-2013 **Lab Code:** K1309582-014DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	10.4		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.15		
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	0.09	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.012	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.021	J	
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.09	J	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	25.4		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.007	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	1.64		
Selenium	6020A	1.5	0.5	0.2	1.0	09/17/13	09/24/13	0.3	J	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.006	J	U
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.004	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	4.50		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/10/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: NL-11-2013 Lab Code: K1309582-015DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	2.8		U
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.04	J	U
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	0.13	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.012	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.046		
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.06	J	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	24.7		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.007	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	2.44		
Selenium	6020A	1.5	0.5	0.2	1.0	09/17/13	09/24/13	0.5	U	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.012	J	U
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	11.46		

Comments:

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	Service Request:	K1309582
Project No.:	14005.066.301	Date Collected:	09/10/13
Project Name:	TO66 Adak LTM 2013	Date Received:	09/13/13
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: NL-12-2013 Lab Code: K1309582-016DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6020A	2.0	1.0	0.3	1.0	09/17/13	09/24/13	8.1		
Antimony	6020A	0.05	0.05	0.02	1.0	09/17/13	09/24/13	0.10		U
Arsenic	6020A	0.50	0.13	0.07	1.0	09/17/13	09/24/13	0.11	J	
Beryllium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.008	J	U
Cadmium	6020A	0.030	0.010	0.003	1.0	09/17/13	09/24/13	0.010	U	
Chromium	6020A	0.20	0.05	0.04	1.0	09/17/13	09/24/13	0.11	J	
Copper	6020A	0.10	0.05	0.02	1.0	09/17/13	09/24/13	2.02		
Lead	6020A	0.030	0.010	0.005	1.0	09/17/13	09/24/13	0.028	J	
Mercury	7470A	0.20	0.05	0.02	1.0	09/16/13	09/16/13	0.05	U	
Nickel	6020A	0.20	0.10	0.03	1.0	09/17/13	09/24/13	1.02		
Selenium	6020A	1.5	0.5	0.2	1.0	09/17/13	09/24/13	0.5	U	
Silver	6020A	0.030	0.010	0.004	1.0	09/17/13	09/24/13	0.010	U	
Thallium	6020A	0.030	0.005	0.002	1.0	09/17/13	09/24/13	0.005	U	
Zinc	6020A	0.80	0.25	0.25	1.0	09/17/13	09/24/13	3.00		

Comments:

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 9 through September 10, 2013
LDC Report Date:	October 15, 2013
Matrix:	Water
Parameters:	Wet Chemistry
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309582

Sample Identification

A-2-2013
B-1-2013
A-5-2013
A-3-2013
NL-14-2013
RLSW03-2013
RLSW13-2013
RLSW04-2013
RLSW05-2013
NL-11-2013
NL-12-2013
RLSW04-2013MS
RLSW04-2013MSD
RLSW04-2013DUP
NL-11-2013DUP

Introduction

This data review covers 15 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Standard Method 2320B for Alkalinity, Standard Method 4500-NH3-G for Ammonia as N, Standard Method 5220C for Chemical Oxygen Demand, EPA Method 300.0 for Sulfate, Standard Method 2540C for Total Dissolved Solids, and ASTM D1426-93B for Total Kjeldahl Nitrogen.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Continuing Calibration

Continuing calibration frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Concentration	Associated Samples
PB1 (prep blank)	Alkalinity	5.9 mg/L	A-2-2013 A-5-2013 NL-14-2013 RLSW04-2013 RLSW05-2013 NL-12-2013
PB2 (prep blank)	Alkalinity	1.8 mg/L	B-1-2013 A-3-2013 RLSW03-2013 RLSW13-2013 NL-11-2013

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
A-3-2013	Alkalinity	1.7 mg/L	1.7U mg/L
RLSW03-2013	Alkalinity	2.6 mg/L	2.6U mg/L

Sample	Analyte	Reported Concentration	Modified Final Concentration
RLSW13-2013	Alkalinity	1.7 mg/L	1.7U mg/L
RLSW05-2013	Alkalinity	22.7 mg/L	22.7U mg/L

No field blanks were identified in this SDG.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Sample Result Verification

All sample result verifications were acceptable.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

Samples RLSW03-2013 and RLSW13-2013 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L)		RPD (Limits)
	RLSW03-2013	RLSW13-2013	
Alkalinity	2.6	1.7	42 (≤50)
Sulfate	58.0	58.2	0 (≤50)
Total dissolved solids	152	115	28 (≤50)

Analyte	Concentration (mg/L)		RPD (Limits)
	RLSW03-2013	RLSW13-2013	
Total kjeldahl nitrogen	0.29	0.30	3 (≤50)

Adak LTM 2013
Wet Chemistry - Data Qualification Summary - SDG K1309582

No Sample Data Qualified in this SDG

Adak LTM 2013
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG K1309582

SDG	Sample	Analyte	Modified Final Concentration	A or P
K1309582	A-3-2013	Alkalinity	1.7U mg/L	A
K1309582	RLSW03-2013	Alkalinity	2.6U mg/L	A
K1309582	RLSW13-2013	Alkalinity	1.7U mg/L	A
K1309582	RLSW05-2013	Alkalinity	22.7U mg/L	A

Adak LTM 2013
Wet Chemistry - Field Blank Data Qualification Summary - SDG K1309582

No Sample Data Qualified in this SDG

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Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309582
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/13 - 09/10/13
Sample Matrix:	Water	**Date Received:**	09/13/13
Analysis Method:	SM 2320 B	**Units:**	mg/L
		Basis:	NA

Alkalinity as CaCO3, Total

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
A-2-2013	K1309582-002	112	9.0	6.0	3.0	1	09/17/13 15:02	
B-1-2013	K1309582-004	ND U	2.0	1.0	1.0	1	09/23/13 14:10	
A-5-2013	K1309582-005	39.3	9.0	6.0	3.0	1	09/17/13 15:02	
A-3-2013	K1309582-006	1.7 J u	2.0	1.0	1.0	1	09/23/13 14:10	
NL-14-2013	K1309582-010	167	9.0	6.0	3.0	1	09/17/13 15:02	
RLSW03-2013	K1309582-011	2.6 u	2.0	1.0	1.0	1	09/23/13 14:10	
RLSW13-2013	K1309582-012	1.7 J u	2.0	1.0	1.0	1	09/23/13 14:10	
RLSW04-2013	K1309582-013	36.0	9.0	6.0	3.0	1	09/17/13 15:02	
RLSW05-2013	K1309582-014	22.7 u	9.0	6.0	3.0	1	09/17/13 15:02	
NL-11-2013	K1309582-015	20.5	2.0	1.0	1.0	1	09/23/13 14:10	
NL-12-2013	K1309582-016	33.4	9.0	6.0	3.0	1	09/17/13 15:02	
Method Blank	K1309582-MB1	5.9 J	9.0	6.0	3.0	1	09/17/13 15:02	
Method Blank	K1309582-MB2	5.9 J	9.0	6.0	3.0	1	09/17/13 15:02	
Method Blank	K1309582-MB3	1.8 J	2.0	1.0	1.0	1	09/23/13 14:10	

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Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309582
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/13 - 09/10/13
Sample Matrix:	Water	**Date Received:**	09/13/13
Analysis Method:	SM 4500-NH3 G	**Units:**	mg/L
		Basis:	NA

Ammonia as Nitrogen

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
A-2-2013	K1309582-002	0.022 J	0.050	0.040	0.020	1	09/20/13 10:11	
B-1-2013	K1309582-004	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
A-5-2013	K1309582-005	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
A-3-2013	K1309582-006	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
NL-14-2013	K1309582-010	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
RLSW03-2013	K1309582-011	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
RLSW13-2013	K1309582-012	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
RLSW04-2013	K1309582-013	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
RLSW05-2013	K1309582-014	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
NL-11-2013	K1309582-015	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
NL-12-2013	K1309582-016	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
Method Blank	K1309582-MB1	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
Method Blank	K1309582-MB2	ND U	0.050	0.040	0.020	1	09/20/13 10:11	
Method Blank	K1309582-MB3	ND U	0.050	0.040	0.020	1	09/20/13 10:11	

11/7/13

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309582
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/13 - 09/10/13
Sample Matrix:	Water	**Date Received:**	09/13/13
Analysis Method:	SM 5220 C	**Units:**	mg/L
		Basis:	NA

Chemical Oxygen Demand (COD)

Sample Name	Lab Code	Result		LOQ	LOD	MDL	Dil.	Date Analyzed	Q
A-2-2013	K1309582-002	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
B-1-2013	K1309582-004	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
A-5-2013	K1309582-005	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
A-3-2013	K1309582-006	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
NL-14-2013	K1309582-010	10.4		5.0	3.0	3.0	1	09/17/13 13:20	
RLSW03-2013	K1309582-011	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
RLSW13-2013	K1309582-012	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
RLSW04-2013	K1309582-013	10.9		5.0	3.0	3.0	1	09/17/13 13:20	
RLSW05-2013	K1309582-014	3.5	J	5.0	3.0	3.0	1	09/17/13 13:20	
NL-11-2013	K1309582-015	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
NL-12-2013	K1309582-016	5.0	J	5.0	3.0	3.0	1	09/17/13 13:20	
Method Blank	K1309582-MB1	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
Method Blank	K1309582-MB2	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
Method Blank	K1309582-MB3	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
Method Blank	K1309582-MB4	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	
Method Blank	K1309582-MB5	ND	U	5.0	3.0	3.0	1	09/17/13 13:20	

11/7/13

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309582
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/13 - 09/10/13
Sample Matrix:	Water	**Date Received:**	09/13/13
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Sulfate

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
A-2-2013	K1309582-002	**38.6**	0.50	0.10	0.05	5	09/14/13 09:58	
B-1-2013	K1309582-004	**57.5**	1.0	0.2	0.1	10	09/14/13 10:08	
A-5-2013	K1309582-005	**46.0**	1.0	0.2	0.1	10	09/14/13 10:18	
A-3-2013	K1309582-006	**25.7**	0.50	0.10	0.05	5	09/14/13 10:27	
NL-14-2013	K1309582-010	**58.5**	1.0	0.2	0.1	10	09/13/13 19:42	
RLSW03-2013	K1309582-011	**58.0**	1.0	0.2	0.1	10	09/14/13 10:37	
RLSW13-2013	K1309582-012	**58.2**	1.0	0.2	0.1	10	09/14/13 10:47	
RLSW04-2013	K1309582-013	**25.0**	0.50	0.10	0.05	5	09/14/13 09:38	
RLSW05-2013	K1309582-014	**27.6**	0.50	0.10	0.05	5	09/14/13 10:57	
NL-11-2013	K1309582-015	**48.0**	1.0	0.2	0.1	10	09/14/13 11:07	
NL-12-2013	K1309582-016	**23.8**	0.50	0.10	0.05	5	09/14/13 11:38	
Method Blank	K1309582-MB1	ND U	0.10	0.02	0.01	1	09/13/13 09:25	
Method Blank	K1309582-MB2	ND U	0.10	0.02	0.01	1	09/13/13 16:25	

11/7/13

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309582
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/13 - 09/10/13
Sample Matrix:	Water	**Date Received:**	09/13/13
Analysis Method:	SM 2540 C	**Units:**	mg/L
		Basis:	NA

Solids, Total Dissolved

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
A-2-2013	K1309582-002	**202**	10	-	-	1	09/16/13 14:35	
B-1-2013	K1309582-004	**133**	10	-	-	1	09/16/13 14:35	
A-5-2013	K1309582-005	**180**	10	-	-	1	09/16/13 14:35	
A-3-2013	K1309582-006	**89**	10	-	-	1	09/17/13 15:10	
NL-14-2013	K1309582-010	**312**	10	-	-	1	09/16/13 14:35	
RLSW03-2013	K1309582-011	**152**	10	-	-	1	09/16/13 14:35	
RLSW13-2013	K1309582-012	**115**	10	-	-	1	09/16/13 14:35	
RLSW04-2013	K1309582-013	**111**	10	-	-	1	09/16/13 14:35	
RLSW05-2013	K1309582-014	**127**	10	-	-	1	09/16/13 14:35	
NL-11-2013	K1309582-015	**155**	10	-	-	1	09/17/13 15:10	
NL-12-2013	K1309582-016	**113**	10	-	-	1	09/17/13 15:10	
Method Blank	K1309582-MB1	ND U	10	-	-	1	09/16/13 14:35	
Method Blank	K1309582-MB2	ND U	5.0	-	-	1	09/16/13 14:35	
Method Blank	K1309582-MB3	ND U	10	-	-	1	09/16/13 14:35	
Method Blank	K1309582-MB4	ND U	10	-	-	1	09/17/13 15:10	
Method Blank	K1309582-MB5	ND U	5.0	-	-	1	09/17/13 15:10	

11/7/13

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309582
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/09/13 - 09/10/13
Sample Matrix:	Water	**Date Received:**	09/13/13
Analysis Method:	ASTM D1426-93B	**Units:**	mg/L
Prep Method:	ASTM D 3590-89B-21.1	**Basis:**	NA

Nitrogen, Total Kjeldahl (TKN)

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
A-2-2013	K1309582-002	**0.29 J**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
B-1-2013	K1309582-004	**0.31 J**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
A-5-2013	K1309582-005	**0.28 J**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
A-3-2013	K1309582-006	**0.33 J**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
NL-14-2013	K1309582-010	**0.51**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
RLSW03-2013	K1309582-011	**0.29 J**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
RLSW13-2013	K1309582-012	**0.30 J**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
RLSW04-2013	K1309582-013	**0.29 J**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
RLSW05-2013	K1309582-014	**0.28 J**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
NL-11-2013	K1309582-015	**0.28 J**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
NL-12-2013	K1309582-016	**0.25 J**	0.40	0.40	0.16	2	09/20/13 07:35	9/18/13	
Method Blank	K1309582-MB1	ND U	0.20	0.40	0.16	2	09/20/13 07:35	9/18/13	

10/7/13

LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 6, 2013

SUBJECT: ADAK LTM 2013, TO 66, Data Validation

Dear Ms. Wunderlich,

Enclosed is the final validation report for the fractions listed below with form 1s. This SDG was received on October 14, 2013. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 30576:

SDG #	Fraction
K1309679	Volatiles, Polynuclear Aromatic Hydrocarbons, Gasoline Range Organics, Diesel Range Organics

The data validation was performed under EPA Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008

Please feel free to contact us if you have any questions.

Sincerely,

EPacuto for

Ming-Hwa Hwang
Project Manager/Senior Chemist

Attachment 1

Level IV

LDC #30576 (Sealaska-Poulsbo, WA / Adak LTM 2013, TO 66)

Project #14005.066.301

LDC	SDG#	DATE REC'D	(3) DATE DUE	BTEX (8260B)		PAHs (8270D -SIM)		GRO (101)		DRO (AK102)																													
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1309679	10/14/13	11/04/13	3	0	2	0	3	0	1	0																												
Total	T/MH			3	0	2	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9

Shaded cells indicate Level IV validation (all other cells are ADEC Checklist validation). These sample counts do not inclute MS/MSD, and DUPs

30576ST.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 15, 2013
LDC Report Date:	October 30, 2013
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309679

Sample Identification

TB091513A
NL-09-2013
NL-19-2013
NL-09-2013MS
NL-09-2013MSD

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample TB091513A was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples NL-09-2013 and NL-19-2013 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	NL-09-2013	NL-19-2013	
Benzene	0.74	0.62	18 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	NL-09-2013	NL-19-2013	
Toluene	2.9	2.5	15 (≤50)
Ethylbenzene	8.0	7.0	13 (≤50)
m,p-Xylenes	5.9	5.1	15 (≤50)
o-Xylene	0.96	0.91	5 (≤50)

Adak LTM 2013
Volatiles - Data Qualification Summary - SDG K1309679

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1309679

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Field Blank Data Qualification Summary - SDG K1309679

No Sample Data Qualified in this SDG

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309679
Date Collected: 09/15/2013
Date Received: 09/16/2013

Volatile Organic Compounds

Sample Name: TB091513A
Lab Code: K1309679-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/27/13	09/27/13	KWG1310610	
Toluene	ND	U	0.50	0.10	0.054	1	09/27/13	09/27/13	KWG1310610	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/27/13	09/27/13	KWG1310610	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/27/13	09/27/13	KWG1310610	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/27/13	09/27/13	KWG1310610	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	95	70-120	09/27/13	Acceptable
Dibromofluoromethane	88	85-115	09/27/13	Acceptable
Toluene-d8	98	85-120	09/27/13	Acceptable
4-Bromofluorobenzene	92	75-120	09/27/13	Acceptable

11/6/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309679
Date Collected: 09/15/2013
Date Received: 09/16/2013

Volatile Organic Compounds

Sample Name: NL-09-2013
Lab Code: K1309679-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.74**		0.50	0.10	0.062	1	09/27/13	09/27/13	KWG1310610	
Toluene	**2.9**		0.50	0.10	0.054	1	09/27/13	09/27/13	KWG1310610	
Ethylbenzene	**8.0**		0.50	0.10	0.050	1	09/27/13	09/27/13	KWG1310610	
m,p-Xylenes	**5.9**		0.50	0.20	0.11	1	09/27/13	09/27/13	KWG1310610	
o-Xylene	**0.96**		0.50	0.20	0.074	1	09/27/13	09/27/13	KWG1310610	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	70-120	09/27/13	Acceptable
Dibromofluoromethane	90	85-115	09/27/13	Acceptable
Toluene-d8	97	85-120	09/27/13	Acceptable
4-Bromofluorobenzene	93	75-120	09/27/13	Acceptable

11/6/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309679
Date Collected: 09/15/2013
Date Received: 09/16/2013

Volatile Organic Compounds

Sample Name: NL-19-2013
Lab Code: K1309679-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.62**		0.50	0.10	0.062	1	09/27/13	09/27/13	KWG1310610	
Toluene	**2.5**		0.50	0.10	0.054	1	09/27/13	09/27/13	KWG1310610	
Ethylbenzene	**7.0**		0.50	0.10	0.050	1	09/27/13	09/27/13	KWG1310610	
m,p-Xylenes	**5.1**		0.50	0.20	0.11	1	09/27/13	09/27/13	KWG1310610	
o-Xylene	**0.91**		0.50	0.20	0.074	1	09/27/13	09/27/13	KWG1310610	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	70-120	09/27/13	Acceptable
Dibromofluoromethane	91	85-115	09/27/13	Acceptable
Toluene-d8	98	85-120	09/27/13	Acceptable
4-Bromofluorobenzene	94	75-120	09/27/13	Acceptable

11/6/13

Comments:

LDC Report# 30576A2b

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 15, 2013
LDC Report Date:	October 30, 2013
Matrix:	Water
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309679

Sample Identification

NL-09-2013
NL-19-2013

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270D using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/23/13	Indeno(1,2,3-cd)pyrene	23	All samples in SDG K1309679	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% .

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No dibenzo(a,h)anthracene was found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG1310134-4	9/19/13	Pyrene Benzo(a)anthracene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	0.0060 ug/L 0.0032 ug/L 0.0026 ug/L 0.0052 ug/L	All samples in SDG K1309679

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
NL-09-2013	Pyrene Benzo(a)anthracene	0.0059 ug/L 0.0032 ug/L	0.020U ug/L 0.020U ug/L
NL-19-2013	Pyrene Benzo(a)anthracene	0.0080 ug/L 0.0042 ug/L	0.026U ug/L 0.026U ug/L

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples NL-09-2013 and NL-19-2013 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	NL-09-2013	NL-19-2013	
Naphthalene	0.25	0.15	50 (≤50)
2-Methylnaphthalene	0.027	0.018	40 (≤50)
Acenaphthene	0.023	0.018	24 (≤50)
Fluorene	0.056	0.045	22 (≤50)
Phenanthrene	0.013	0.013	0 (≤50)
Pyrene	0.0059	0.0080	30 (≤50)
Benzo(a)anthracene	0.0032	0.0042	27 (≤50)

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1309679

SDG	Sample	Compound	Flag	A or P	Reason
K1309679	NL-09-2013 NL-19-2013	Indeno(1,2,3-cd)pyrene	J (all detects) UJ (all non-detects)	A	Continuing calibration (CCV %D)

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1309679

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K1309679	NL-09-2013	Pyrene Benzo(a)anthracene	0.020U ug/L 0.020U ug/L	A
K1309679	NL-19-2013	Pyrene Benzo(a)anthracene	0.026U ug/L 0.026U ug/L	A

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1309679

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309679
Project:	Adak LTM 2013/14005.066.301	**Date Collected:**	09/15/2013
Sample Matrix:	Water	**Date Received:**	09/16/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	NL-09-2013	**Units:**	ug/L
Lab Code:	K1309679-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.25**	X		0.020	0.0050	0.0030	1	09/19/13	09/24/13	KWG1310134	
2-Methylnaphthalene	**0.027**			0.020	0.0050	0.0023	1	09/19/13	09/24/13	KWG1310134	
Acenaphthylene	ND	U		0.020	0.0050	0.0034	1	09/19/13	09/24/13	KWG1310134	
Acenaphthene	**0.023**			0.020	0.0050	0.0044	1	09/19/13	09/24/13	KWG1310134	
Fluorene	**0.056**			0.020	0.0050	0.0038	1	09/19/13	09/24/13	KWG1310134	
Phenanthrene	**0.013**	J		0.020	0.0050	0.0080	1	09/19/13	09/24/13	KWG1310134	
Anthracene	ND	U		0.020	0.0050	0.0036	1	09/19/13	09/24/13	KWG1310134	
Fluoranthene	ND	U		0.020	0.0050	0.0044	1	09/19/13	09/24/13	KWG1310134	
Pyrene	**0.0059**	J	0.0204	0.020	0.0050	0.0035	1	09/19/13	09/24/13	KWG1310134	
Benz(a)anthracene	**0.0032**	J	0.0204	0.020	0.0050	0.0026	1	09/19/13	09/24/13	KWG1310134	
Chrysene	ND	U		0.020	0.0050	0.0034	1	09/19/13	09/24/13	KWG1310134	
Benzo(b)fluoranthene	ND	U		0.020	0.0050	0.0023	1	09/19/13	09/24/13	KWG1310134	
Benzo(k)fluoranthene	ND	U		0.020	0.0050	0.0025	1	09/19/13	09/24/13	KWG1310134	
Benzo(a)pyrene	ND	U		0.020	0.0050	0.0043	1	09/19/13	09/24/13	KWG1310134	
Indeno(1,2,3-cd)pyrene	ND	U	UJ	0.020	0.0050	0.0026	1	09/19/13	09/24/13	KWG1310134	
Dibenz(a,h)anthracene	ND	U		0.020	0.0050	0.0025	1	09/19/13	09/24/13	KWG1310134	
Benzo(g,h,i)perylene	ND	U		0.020	0.0050	0.0029	1	09/19/13	09/24/13	KWG1310134	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	85	28-98	09/24/13	Acceptable
Fluoranthene-d10	97	31-105	09/24/13	Acceptable
Terphenyl-d14	91	27-112	09/24/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309679
Project:	Adak LTM 2013/14005.066.301	**Date Collected:**	09/15/2013
Sample Matrix:	Water	**Date Received:**	09/16/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	NL-19-2013	**Units:**	ug/L
Lab Code:	K1309679-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.15**	X	0.026	0.0065	0.0039	1	09/19/13	09/24/13	KWG1310134	
2-Methylnaphthalene	**0.018**	J	0.026	0.0065	0.0030	1	09/19/13	09/24/13	KWG1310134	
Acenaphthylene	ND	U	0.026	0.0065	0.0044	1	09/19/13	09/24/13	KWG1310134	
Acenaphthene	**0.018**	J	0.026	0.0065	0.0057	1	09/19/13	09/24/13	KWG1310134	
Fluorene	**0.045**		0.026	0.0065	0.0049	1	09/19/13	09/24/13	KWG1310134	
Phenanthrene	**0.013**	J	0.026	0.0065	0.011	1	09/19/13	09/24/13	KWG1310134	
Anthracene	ND	U	0.026	0.0065	0.0047	1	09/19/13	09/24/13	KWG1310134	
Fluoranthene	ND	U	0.026	0.0065	0.0057	1	09/19/13	09/24/13	KWG1310134	
Pyrene	**0.0080**	JX 0.026U	0.026	0.0065	0.0045	1	09/19/13	09/24/13	KWG1310134	
Benz(a)anthracene	**0.0042**	J 0.026U	0.026	0.0065	0.0034	1	09/19/13	09/24/13	KWG1310134	
Chrysene	ND	U	0.026	0.0065	0.0044	1	09/19/13	09/24/13	KWG1310134	
Benzo(b)fluoranthene	ND	U	0.026	0.0065	0.0030	1	09/19/13	09/24/13	KWG1310134	
Benzo(k)fluoranthene	ND	U	0.026	0.0065	0.0033	1	09/19/13	09/24/13	KWG1310134	
Benzo(a)pyrene	ND	U	0.026	0.0065	0.0056	1	09/19/13	09/24/13	KWG1310134	
Indeno(1,2,3-cd)pyrene	ND	U UJ	0.026	0.0065	0.0034	1	09/19/13	09/24/13	KWG1310134	
Dibenz(a,h)anthracene	ND	U	0.026	0.0065	0.0033	1	09/19/13	09/24/13	KWG1310134	
Benzo(g,h,i)perylene	ND	U	0.026	0.0065	0.0038	1	09/19/13	09/24/13	KWG1310134	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	76	28-98	09/24/13	Acceptable
Fluoranthene-d10	88	31-105	09/24/13	Acceptable
Terphenyl-d14	85	27-112	09/24/13	Acceptable

11/6/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 15, 2013
LDC Report Date:	November 4, 2013
Matrix:	Water
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309679

Sample Identification

TB091513A
NL-09-2013
NL-19-2013

Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK101 for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 25.0%.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks.

Sample TB091513A was identified as a trip blank. No gasoline range organic contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples NL-09-2013 and NL-19-2013 were identified as field duplicates. No gasoline range organics were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	NL-09-2013	NL-19-2013	
Gasoline range organics (C6-C10)	130	120	8 (≤50)

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1309679

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309679

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1309679

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309679
Project:	Adak LTM 2013/14005.066.301	**Date Collected:**	09/15/2013
Sample Matrix:	Water	**Date Received:**	09/16/2013

Gasoline Range Organics

Sample Name:	TB091513A	**Units:**	ug/L
Lab Code:	K1309679-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/23/13	09/23/13	KWG1310406	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	89	50-150	09/23/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309679
Project:	Adak LTM 2013/14005.066.301	**Date Collected:**	09/15/2013
Sample Matrix:	Water	**Date Received:**	09/16/2013

Gasoline Range Organics

Sample Name:	NL-09-2013	**Units:**	ug/L
Lab Code:	K1309679-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**130**	Y	100	25	13	1	09/23/13	09/23/13	KWG1310406	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	85	50-150	09/23/13	Acceptable

11/6/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309679
Date Collected: 09/15/2013
Date Received: 09/16/2013

Gasoline Range Organics

Sample Name: NL-19-2013
Lab Code: K1309679-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: AK101

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**120**	Y	100	25	13	1	09/23/13	09/23/13	KWG1310406	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	88	50-150	09/23/13	Acceptable

9/16/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 15, 2013
LDC Report Date:	October 30, 2013
Matrix:	Water
Parameters:	Diesel Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309679

Sample Identification

NL-09-2013

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK102 for Diesel Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than 25.0% .

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
KWG1310659-5	9/26/13	Diesel range organics (C10-C25)	12 ug/L	All samples in SDG K1309679

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Diesel Range Organics - Data Qualification Summary - SDG K1309679

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309679

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1309679

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309679
Project:	Adak LTM 2013/14005.066.301	**Date Collected:**	09/15/2013
Sample Matrix:	Water	**Date Received:**	09/16/2013

Diesel Range Organics

Sample Name:	NL-09-2013	**Units:**	ug/L
Lab Code:	K1309679-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**390**	Y	48	20	11	1	09/26/13	09/28/13	KWG1310659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	89	50-150	09/28/13	Acceptable

11/6/13

Comments:

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 6, 2013

SUBJECT: ADAK LTM 2013, TO 66, Data Validation

Dear Ms. Wunderlich,

Enclosed is the final validation report for the fractions listed below with form 1s. This SDG was received on October 15, 2013. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 30585:

SDG #	Fraction
K1309014	Volatiles, Polynuclear Aromatic Hydrocarbons, Metals, Wet Chemistry, Gasoline Range Organics, Diesel Range Organics, Methane

The data validation was performed under EPA Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2010

Please feel free to contact us if you have any questions.

Sincerely,

EPauto for

Ming-Hwa Hwang
Project Manager/Senior Chemist

L:\Sealaska\Adak\30585COV.wpd

Attachment 1

Level IV

LDC #30585 (Sealaska-Poulsbo, WA / Adak LTM 2013, TO 66)

Project #14005.066.301

LDC	SDG#	DATE REC'D	(3) DATE DUE	BTEX (8260B)		PAHs (8270D -SIM)		Metals (6020A /7000)		Diss. Metals (SW846)		Methane (175)		GRO (101)		DRO (AK102)		Alk. (2320B)		SO_4 (300.0)		Benzene (8260B)		PAH (8270D SIM-1cpd)												
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1309014	10/15/13	11/05/13	12	0	8	1	1	0	1	0	1	0	2	0	9	2	1	0	1	0	1	0	1	0											
Total	A/MH			12	0	8	1	1	0	1	0	1	0	2	0	9	2	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	41

Shaded cells indicate Level IV validation (all other cells are ADEC Checklist validation). These sample counts do not inclute MS/MSD, and DUPs

30585ST.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 30 through August 31, 2013
LDC Report Date:	October 31, 2013
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309014

Sample Identification

MW-303-30-2013
TB083013C
650-2013
02-231-2013
02-241-2013
AS-1-2013
02-232-2013
TB083013-B
TB083013A
651-2013
MW-E006-2013
LC5A-2013
NSWSD-7-2013
02-232-2013MS
02-232-2013MSD

Introduction

This data review covers 15 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Samples TB083013C, TB083013-B, and TB083013A were identified as field blanks. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
02-232-2013MS/MSD (02-232-2013)	Benzene	-	78 (80-120)	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 02-231-2013 and 02-241-2013 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	02-231-2013	02-241-2013	
Benzene	21	22	5 (≤50)
Toluene	2.3	2.3	0 (≤50)
Ethylbenzene	60	59	2 (≤50)
m,p-Xylenes	170	170	0 (≤50)
o-Xylene	6.7	6.7	0 (≤50)

Adak LTM 2013
Volatiles - Data Qualification Summary - SDG K1309014

SDG	Sample	Compound	Flag	A or P	Reason
K1309014	02-232-2013	Benzene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)

Adak LTM 2013
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Field Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309014
Date Collected: 08/30/2013
Date Received: 09/03/2013

Volatile Organic Compounds

Sample Name: MW-303-30-2013
Lab Code: K1309014-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**1.4**	JD	2.5	0.50	0.31	5	09/10/13	09/10/13	KWG1309697	
Toluene	**330**	D	2.5	0.50	0.27	5	09/10/13	09/10/13	KWG1309697	
Ethylbenzene	**1100**	D	25	5.0	2.5	50	09/10/13	09/10/13	KWG1309697	
m,p-Xylenes	**1400**	D	25	10	5.5	50	09/10/13	09/10/13	KWG1309697	
o-Xylene	**540**	D	25	10	3.7	50	09/10/13	09/10/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	92	70-120	09/10/13	Acceptable
Dibromofluoromethane	98	85-115	09/10/13	Acceptable
Toluene-d8	107	85-120	09/10/13	Acceptable
4-Bromofluorobenzene	96	75-120	09/10/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Volatile Organic Compounds

Sample Name:	TB083013C	**Units:**	ug/L
Lab Code:	K1309014-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/09/13	09/09/13	KWG1309697	
Toluene	ND	U	0.50	0.10	0.054	1	09/09/13	09/09/13	KWG1309697	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/09/13	09/09/13	KWG1309697	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/09/13	09/09/13	KWG1309697	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/09/13	09/09/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	107	70-120	09/09/13	Acceptable
Dibromofluoromethane	108	85-115	09/09/13	Acceptable
Toluene-d8	109	85-120	09/09/13	Acceptable
4-Bromofluorobenzene	100	75-120	09/09/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Volatile Organic Compounds

Sample Name:	650-2013	**Units:**	ug/L
Lab Code:	K1309014-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**7.2**		0.50	0.10	0.062	1	09/12/13	09/12/13	KWG1309890	
Toluene	ND	U	0.50	0.10	0.054	1	09/12/13	09/12/13	KWG1309890	
Ethylbenzene	**0.080**	J	0.50	0.10	0.050	1	09/12/13	09/12/13	KWG1309890	
m,p-Xylenes	**0.11**	J	0.50	0.20	0.11	1	09/12/13	09/12/13	KWG1309890	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/12/13	09/12/13	KWG1309890	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	70-120	09/12/13	Acceptable
Dibromofluoromethane	100	85-115	09/12/13	Acceptable
Toluene-d8	100	85-120	09/12/13	Acceptable
4-Bromofluorobenzene	103	75-120	09/12/13	Acceptable

K 11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Volatile Organic Compounds

Sample Name:	02-231-2013	**Units:**	ug/L
Lab Code:	K1309014-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**21**		0.50	0.10	0.062	1	09/09/13	09/09/13	KWG1309697	
Toluene	**2.3**		0.50	0.10	0.054	1	09/09/13	09/09/13	KWG1309697	
Ethylbenzene	**60**		0.50	0.10	0.050	1	09/09/13	09/09/13	KWG1309697	
m,p-Xylenes	**170**	D	5.0	2.0	1.1	10	09/12/13	09/12/13	KWG1309912	
o-Xylene	**6.7**		0.50	0.20	0.074	1	09/09/13	09/09/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	104	70-120	09/09/13	Acceptable
Dibromofluoromethane	102	85-115	09/09/13	Acceptable
Toluene-d8	109	85-120	09/09/13	Acceptable
4-Bromofluorobenzene	102	75-120	09/09/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Volatile Organic Compounds

Sample Name:	02-241-2013	**Units:**	ug/L
Lab Code:	K1309014-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**22**		0.50	0.10	0.062	1	09/09/13	09/09/13	KWG1309697	
Toluene	**2.3**		0.50	0.10	0.054	1	09/09/13	09/09/13	KWG1309697	
Ethylbenzene	**59**		0.50	0.10	0.050	1	09/09/13	09/09/13	KWG1309697	
m,p-Xylenes	**170**	D	5.0	2.0	1.1	10	09/12/13	09/12/13	KWG1309912	
o-Xylene	**6.7**		0.50	0.20	0.074	1	09/09/13	09/09/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	96	70-120	09/09/13	Acceptable
Dibromofluoromethane	99	85-115	09/09/13	Acceptable
Toluene-d8	107	85-120	09/09/13	Acceptable
4-Bromofluorobenzene	99	75-120	09/09/13	Acceptable

11/6/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309014
Date Collected: 08/30/2013
Date Received: 09/03/2013

Volatile Organic Compounds

Sample Name: AS-1-2013
Lab Code: K1309014-006

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**17**		0.50	0.10	0.062	1	09/09/13	09/09/13	KWG1309697	
Toluene	**0.090**	J	0.50	0.10	0.054	1	09/09/13	09/09/13	KWG1309697	
Ethylbenzene	**1.7**		0.50	0.10	0.050	1	09/09/13	09/09/13	KWG1309697	
m,p-Xylenes	**3.7**		0.50	0.20	0.11	1	09/09/13	09/09/13	KWG1309697	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/09/13	09/09/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	94	70-120	09/09/13	Acceptable
Dibromofluoromethane	100	85-115	09/09/13	Acceptable
Toluene-d8	104	85-120	09/09/13	Acceptable
4-Bromofluorobenzene	100	75-120	09/09/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Volatile Organic Compounds

Sample Name:	02-232-2013	**Units:**	ug/L
Lab Code:	K1309014-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.14**	J	J	0.50	0.10	0.062	1	09/09/13	09/09/13	KWG1309697	
Toluene	ND	U		0.50	0.10	0.054	1	09/09/13	09/09/13	KWG1309697	
Ethylbenzene	**0.090**	J		0.50	0.10	0.050	1	09/09/13	09/09/13	KWG1309697	
m,p-Xylenes	ND	U		0.50	0.20	0.11	1	09/09/13	09/09/13	KWG1309697	
o-Xylene	ND	U		0.50	0.20	0.074	1	09/09/13	09/09/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	104	70-120	09/09/13	Acceptable
Dibromofluoromethane	104	85-115	09/09/13	Acceptable
Toluene-d8	104	85-120	09/09/13	Acceptable
4-Bromofluorobenzene	101	75-120	09/09/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Volatile Organic Compounds

Sample Name:	TB083013-B	**Units:**	ug/L
Lab Code:	K1309014-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/09/13	09/09/13	KWG1309697	
Toluene	ND	U	0.50	0.10	0.054	1	09/09/13	09/09/13	KWG1309697	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/09/13	09/09/13	KWG1309697	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/09/13	09/09/13	KWG1309697	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/09/13	09/09/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	102	70-120	09/09/13	Acceptable
Dibromofluoromethane	103	85-115	09/09/13	Acceptable
Toluene-d8	105	85-120	09/09/13	Acceptable
4-Bromofluorobenzene	99	75-120	09/09/13	Acceptable

11/6/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309014
Date Collected: 08/30/2013
Date Received: 09/03/2013

Volatile Organic Compounds

Sample Name: TB083013A
Lab Code: K1309014-013

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/09/13	09/09/13	KWG1309697	
Toluene	ND	U	0.50	0.10	0.054	1	09/09/13	09/09/13	KWG1309697	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/09/13	09/09/13	KWG1309697	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/09/13	09/09/13	KWG1309697	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/09/13	09/09/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	104	70-120	09/09/13	Acceptable
Dibromofluoromethane	104	85-115	09/09/13	Acceptable
Toluene-d8	104	85-120	09/09/13	Acceptable
4-Bromofluorobenzene	100	75-120	09/09/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Volatile Organic Compounds

Sample Name:	651-2013	**Units:**	ug/L
Lab Code:	K1309014-014	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**3.3**		0.50	0.10	0.062	1	09/09/13	09/09/13	KWG1309697	
Toluene	**1.6**		0.50	0.10	0.054	1	09/09/13	09/09/13	KWG1309697	
Ethylbenzene	**33**		0.50	0.10	0.050	1	09/09/13	09/09/13	KWG1309697	
m,p-Xylenes	**96**		0.50	0.20	0.11	1	09/09/13	09/09/13	KWG1309697	
o-Xylene	**1.4**		0.50	0.20	0.074	1	09/09/13	09/09/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	70-120	09/09/13	Acceptable
Dibromofluoromethane	99	85-115	09/09/13	Acceptable
Toluene-d8	107	85-120	09/09/13	Acceptable
4-Bromofluorobenzene	100	75-120	09/09/13	Acceptable

11/6/17

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Volatile Organic Compounds

Sample Name:	MW-E006-2013	**Units:**	ug/L
Lab Code:	K1309014-015	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**3.8**		0.50	0.10	0.062	1	09/10/13	09/10/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	70-120	09/10/13	Acceptable
Dibromofluoromethane	99	85-115	09/10/13	Acceptable
Toluene-d8	103	85-120	09/10/13	Acceptable
4-Bromofluorobenzene	95	75-120	09/10/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Volatile Organic Compounds

Sample Name:	LC5A-2013	**Units:**	ug/L
Lab Code:	K1309014-016	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**2.0**		0.50	0.10	0.062	1	09/10/13	09/10/13	KWG1309697	
Toluene	**3.9**		0.50	0.10	0.054	1	09/10/13	09/10/13	KWG1309697	
Ethylbenzene	**55**		0.50	0.10	0.050	1	09/10/13	09/10/13	KWG1309697	
m,p-Xylenes	**57**		0.50	0.20	0.11	1	09/10/13	09/10/13	KWG1309697	
o-Xylene	**2.9**		0.50	0.20	0.074	1	09/10/13	09/10/13	KWG1309697	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	95	70-120	09/10/13	Acceptable
Dibromofluoromethane	102	85-115	09/10/13	Acceptable
Toluene-d8	110	85-120	09/10/13	Acceptable
4-Bromofluorobenzene	97	75-120	09/10/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Volatile Organic Compounds

Sample Name:	NSWSD-7-2013	**Units:**	ug/L
Lab Code:	K1309014-018	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**0.25**	J	0.50	0.10	0.062	1	09/12/13	09/12/13	KWG1309890	
Toluene	**0.17**	J	0.50	0.10	0.054	1	09/12/13	09/12/13	KWG1309890	
Ethylbenzene	**0.53**		0.50	0.10	0.050	1	09/12/13	09/12/13	KWG1309890	
m,p-Xylenes	**1.0**		0.50	0.20	0.11	1	09/12/13	09/12/13	KWG1309890	
o-Xylene	**0.080**	J	0.50	0.20	0.074	1	09/12/13	09/12/13	KWG1309890	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	70-120	09/12/13	Acceptable
Dibromofluoromethane	101	85-115	09/12/13	Acceptable
Toluene-d8	97	85-120	09/12/13	Acceptable
4-Bromofluorobenzene	102	75-120	09/12/13	Acceptable

11/6/13

Comments:

LDC Report# 30585A2b

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 30 through August 31, 2013
LDC Report Date:	November 6, 2013
Matrix:	Sediment/Water
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309014

Sample Identification

MW-303-30-2013
650-2013
02-231-2013
02-241-2013
AS-1-2013
02-232-2013
651-2013
LC5A-2013
NSWSD-7-2013
852S-2013
AS-1-2013MS
AS-1-2013MSD
NSWSD-7-2013MS
NSWSD-7-2013MSD

Introduction

This data review covers one sediment sample and 13 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270D using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% .

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbons were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG1309508-7	9/7/13	Benzo(a)anthracene	0.0028 ug/L	All water samples in SDG K1309014

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
AS-1-2013	Benzo(a)anthracene	0.0046 ug/L	0.020U ug/L
LC5A-2013	Benzo(a)anthracene	0.0065 ug/L	0.020U ug/L
NSWSD-7-2013	Benzo(a)anthracene	0.0065 ug/L	0.020U ug/L

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
AS-1-2013MS/MSD (AS-1-2013)	Chrysene Benzo(a)pyrene	- -	111 (55-110) 111 (55-110)	- -	J (all detects) J (all detects)	A
NSWSD-7-2013MS/MSD (NSWSD-7-2013)	Chrysene Benzo(a)pyrene	- -	112 (55-110) 113 (55-110)	- -	J (all detects) J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 02-231-2013 and 02-241-2013 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	02-231-2013	02-241-2013	
Naphthalene	130	130	0 (≤50)
2-Methylnaphthalene	76	76	0 (≤50)
Acenaphthene	1.4	1.4	0 (≤50)
Fluorene	3.6	3.5	3 (≤50)
Phenanthrene	1.2	1.2	0 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	02-231-2013	02-241-2013	
Fluoranthene	0.018	0.020U	Not calculable
Pyrene	0.019	0.014	30 (≤50)

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1309014

SDG	Sample	Compound	Flag	A or P	Reason
K1309014	AS-1-2013 NSWSD-7-2013	Chrysene Benzo(a)pyrene	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1309014

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K1309014	AS-1-2013	Benzo(a)anthracene	0.020U ug/L	A
K1309014	LC5A-2013	Benzo(a)anthracene	0.020U ug/L	A
K1309014	NSWSD-7-2013	Benzo(a)anthracene	0.020U ug/L	A

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309014
Date Collected: 08/30/2013
Date Received: 09/03/2013

Polynuclear Aromatic Hydrocarbons

Sample Name: MW-303-30-2013
Lab Code: K1309014-001

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dibenz(a,h)anthracene	ND	U	0.019	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	28-98	09/08/13	Acceptable
Fluoranthene-d10	96	31-105	09/08/13	Acceptable
Terphenyl-d14	99	27-112	09/08/13	Acceptable

K 11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309014
Date Collected: 08/31/2013
Date Received: 09/03/2013

Polynuclear Aromatic Hydrocarbons

Sample Name: 650-2013
Lab Code: K1309014-003

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.21**	X	0.019	0.0050	0.0030	1	09/05/13	09/08/13	KWG1309508	
2-Methylnaphthalene	**0.036**	X	0.019	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Acenaphthylene	ND	Ui	0.042	0.042	0.042	1	09/05/13	09/08/13	KWG1309508	
Acenaphthene	**0.17**		0.019	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Fluorene	**0.86**		0.019	0.0050	0.0038	1	09/05/13	09/08/13	KWG1309508	
Phenanthrene	ND	U	0.019	0.0050	0.0080	1	09/05/13	09/08/13	KWG1309508	
Anthracene	ND	U	0.019	0.0050	0.0036	1	09/05/13	09/08/13	KWG1309508	
Fluoranthene	**0.029**		0.019	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Pyrene	**0.033**		0.019	0.0050	0.0035	1	09/05/13	09/08/13	KWG1309508	
Benz(a)anthracene	ND	U	0.019	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Chrysene	ND	U	0.019	0.0050	0.0034	1	09/05/13	09/08/13	KWG1309508	
Benzo(b)fluoranthene	ND	U	0.019	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Benzo(k)fluoranthene	ND	U	0.019	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(a)pyrene	ND	U	0.019	0.0050	0.0043	1	09/05/13	09/08/13	KWG1309508	
Indeno(1,2,3-cd)pyrene	ND	U	0.019	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Dibenz(a,h)anthracene	ND	U	0.019	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(g,h,i)perylene	ND	U	0.019	0.0050	0.0029	1	09/05/13	09/08/13	KWG1309508	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	82	28-98	09/08/13	Acceptable
Fluoranthene-d10	97	31-105	09/08/13	Acceptable
Terphenyl-d14	100	27-112	09/08/13	Acceptable

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Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309014
Date Collected: 08/30/2013
Date Received: 09/03/2013

Polynuclear Aromatic Hydrocarbons

Sample Name: 02-231-2013
Lab Code: K1309014-004

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**130**	D	0.39	0.10	0.060	20	09/05/13	09/09/13	KWG1309508	
2-Methylnaphthalene	**76**	D	0.39	0.10	0.046	20	09/05/13	09/09/13	KWG1309508	
Acenaphthylene	ND	Ui	0.44	0.44	0.44	1	09/05/13	09/08/13	KWG1309508	
Acenaphthene	**1.4**		0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Fluorene	**3.6**		0.020	0.0050	0.0038	1	09/05/13	09/08/13	KWG1309508	
Phenanthrene	**1.2**		0.020	0.0050	0.0080	1	09/05/13	09/08/13	KWG1309508	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/05/13	09/08/13	KWG1309508	
Fluoranthene	**0.018**	JX	0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Pyrene	**0.019**	JX	0.020	0.0050	0.0035	1	09/05/13	09/08/13	KWG1309508	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/05/13	09/08/13	KWG1309508	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/05/13	09/08/13	KWG1309508	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/05/13	09/08/13	KWG1309508	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	114	28-98	09/08/13	Outside Control Limits
Fluoranthene-d10	83	31-105	09/08/13	Acceptable
Terphenyl-d14	93	27-112	09/08/13	Acceptable

M 11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309014
Date Collected: 08/30/2013
Date Received: 09/03/2013

Polynuclear Aromatic Hydrocarbons

Sample Name: 02-241-2013
Lab Code: K1309014-005

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**130**	D	0.39	0.10	0.060	20	09/05/13	09/09/13	KWG1309508	
2-Methylnaphthalene	**76**	D	0.39	0.10	0.046	20	09/05/13	09/09/13	KWG1309508	
Acenaphthylene	ND	Ui	0.43	0.43	0.43	1	09/05/13	09/08/13	KWG1309508	
Acenaphthene	**1.4**		0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Fluorene	**3.5**		0.020	0.0050	0.0038	1	09/05/13	09/08/13	KWG1309508	
Phenanthrene	**1.2**		0.020	0.0050	0.0080	1	09/05/13	09/08/13	KWG1309508	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/05/13	09/08/13	KWG1309508	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Pyrene	**0.014**	JX	0.020	0.0050	0.0035	1	09/05/13	09/08/13	KWG1309508	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/05/13	09/08/13	KWG1309508	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/05/13	09/08/13	KWG1309508	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/05/13	09/08/13	KWG1309508	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	113	28-98	09/08/13	Outside Control Limits
Fluoranthene-d10	81	31-105	09/08/13	Acceptable
Terphenyl-d14	87	27-112	09/08/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309014
Date Collected: 08/30/2013
Date Received: 09/03/2013

Polynuclear Aromatic Hydrocarbons

Sample Name: AS-1-2013
Lab Code: K1309014-006

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**18**	JD	0.099	0.025	0.015	5	09/05/13	09/09/13	KWG1309508	
2-Methylnaphthalene	**2.7**		0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Acenaphthylene	ND	Ui	0.025	0.025	0.025	1	09/05/13	09/08/13	KWG1309508	
Acenaphthene	**0.14**	X	0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Fluorene	**0.67**		0.020	0.0050	0.0038	1	09/05/13	09/08/13	KWG1309508	
Phenanthrene	**1.2**		0.020	0.0050	0.0080	1	09/05/13	09/08/13	KWG1309508	
Anthracene	**0.044**	X	0.020	0.0050	0.0036	1	09/05/13	09/08/13	KWG1309508	
Fluoranthene	**0.0090**	J	0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Pyrene	**0.0072**	J	0.020	0.0050	0.0035	1	09/05/13	09/08/13	KWG1309508	
Benz(a)anthracene	**0.0046**	J 0.020U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Chrysene	**0.0045**	J J	0.020	0.0050	0.0034	1	09/05/13	09/08/13	KWG1309508	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/05/13	09/08/13	KWG1309508	
Indeno(1,2,3-cd)pyrene	**0.0028**	J	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Dibenz(a,h)anthracene	**0.0030**	J	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(g,h,i)perylene	**0.0046**	J	0.020	0.0050	0.0029	1	09/05/13	09/08/13	KWG1309508	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	28-98	09/08/13	Acceptable
Fluoranthene-d10	95	31-105	09/08/13	Acceptable
Terphenyl-d14	96	27-112	09/08/13	Acceptable

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Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	02-232-2013	**Units:**	ug/L
Lab Code:	K1309014-007	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.44**	X	0.020	0.0050	0.0030	1	09/05/13	09/08/13	KWG1309508	
2-Methylnaphthalene	**0.012**	JX	0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Acenaphthylene	ND	Ui	0.13	0.13	0.13	1	09/05/13	09/08/13	KWG1309508	
Acenaphthene	**0.68**		0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Fluorene	**1.2**		0.020	0.0050	0.0038	1	09/05/13	09/08/13	KWG1309508	
Phenanthrene	**0.88**		0.020	0.0050	0.0080	1	09/05/13	09/08/13	KWG1309508	
Anthracene	**0.051**	X	0.020	0.0050	0.0036	1	09/05/13	09/08/13	KWG1309508	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Pyrene	ND	U	0.020	0.0050	0.0035	1	09/05/13	09/08/13	KWG1309508	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/05/13	09/08/13	KWG1309508	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/05/13	09/08/13	KWG1309508	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/05/13	09/08/13	KWG1309508	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	81	28-98	09/08/13	Acceptable
Fluoranthene-d10	96	31-105	09/08/13	Acceptable
Terphenyl-d14	89	27-112	09/08/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	651-2013	**Units:**	ug/L
Lab Code:	K1309014-014	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**27**	D	0.20	0.050	0.030	10	09/05/13	09/09/13	KWG1309508	
2-Methylnaphthalene	**8.2**		0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Acenaphthylene	ND	Ui	0.17	0.17	0.17	1	09/05/13	09/08/13	KWG1309508	
Acenaphthene	**1.2**		0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Fluorene	**2.5**		0.020	0.0050	0.0038	1	09/05/13	09/08/13	KWG1309508	
Phenanthrene	**0.47**		0.020	0.0050	0.0080	1	09/05/13	09/08/13	KWG1309508	
Anthracene	**0.060**		0.020	0.0050	0.0036	1	09/05/13	09/08/13	KWG1309508	
Fluoranthene	**0.074**		0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Pyrene	**0.056**		0.020	0.0050	0.0035	1	09/05/13	09/08/13	KWG1309508	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/05/13	09/08/13	KWG1309508	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/05/13	09/08/13	KWG1309508	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/05/13	09/08/13	KWG1309508	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	83	28-98	09/08/13	Acceptable
Fluoranthene-d10	97	31-105	09/08/13	Acceptable
Terphenyl-d14	100	27-112	09/08/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	LC5A-2013	**Units:**	ug/L
Lab Code:	K1309014-016	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**66**	D	0.39	0.10	0.060	20	09/05/13	09/10/13	KWG1309508	
2-Methylnaphthalene	**84**	D	0.39	0.10	0.046	20	09/05/13	09/10/13	KWG1309508	
Acenaphthylene	ND	Ui	0.42	0.42	0.42	1	09/05/13	09/08/13	KWG1309508	
Acenaphthene	**1.4**		0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Fluorene	**4.9**		0.020	0.0050	0.0038	1	09/05/13	09/08/13	KWG1309508	
Phenanthrene	**3.0**		0.020	0.0050	0.0080	1	09/05/13	09/08/13	KWG1309508	
Anthracene	**0.13**		0.020	0.0050	0.0036	1	09/05/13	09/08/13	KWG1309508	
Fluoranthene	**0.097**		0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Pyrene	**0.075**		0.020	0.0050	0.0035	1	09/05/13	09/08/13	KWG1309508	
Benz(a)anthracene	**0.0065**	J 0.0201	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Chrysene	**0.0040**	J	0.020	0.0050	0.0034	1	09/05/13	09/08/13	KWG1309508	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/05/13	09/08/13	KWG1309508	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/05/13	09/08/13	KWG1309508	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	83	28-98	09/08/13	Acceptable
Fluoranthene-d10	93	31-105	09/08/13	Acceptable
Terphenyl-d14	99	27-112	09/08/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 66, Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309014
Date Collected: 08/31/2013
Date Received: 09/03/2013

Polynuclear Aromatic Hydrocarbons

Sample Name: NSWSD-7-2013
Lab Code: K1309014-018

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.16**		0.020	0.0050	0.0030	1	09/05/13	09/08/13	KWG1309508	
2-Methylnaphthalene	**0.030**		0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Acenaphthylene	**0.0053**	J	0.020	0.0050	0.0034	1	09/05/13	09/08/13	KWG1309508	
Acenaphthene	**0.026**		0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Fluorene	**0.021**		0.020	0.0050	0.0038	1	09/05/13	09/08/13	KWG1309508	
Phenanthrene	**0.019**	J	0.020	0.0050	0.0080	1	09/05/13	09/08/13	KWG1309508	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/05/13	09/08/13	KWG1309508	
Fluoranthene	**0.018**	J	0.020	0.0050	0.0044	1	09/05/13	09/08/13	KWG1309508	
Pyrene	**0.014**	J	0.020	0.0050	0.0035	1	09/05/13	09/08/13	KWG1309508	
Benz(a)anthracene	**0.0065**	J	0.020U 0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/05/13	09/08/13	KWG1309508	
Benzo(b)fluoranthene	**0.0034**	J	0.020	0.0050	0.0023	1	09/05/13	09/08/13	KWG1309508	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/05/13	09/08/13	KWG1309508	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/05/13	09/08/13	KWG1309508	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/05/13	09/08/13	KWG1309508	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/05/13	09/08/13	KWG1309508	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	85	28-98	09/08/13	Acceptable
Fluoranthene-d10	93	31-105	09/08/13	Acceptable
Terphenyl-d14	97	27-112	09/08/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Soil	**Date Received:**	09/03/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	852S-2013	**Units:**	ug/Kg
Lab Code:	K1309014-019	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Methylnaphthalene	6.4		3.4	1.0	0.58	1	09/07/13	09/11/13	KWG1309611	
Phenanthrene	ND	Ui	22	22	22	1	09/07/13	09/11/13	KWG1309611	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	53	17-104	09/11/13	Acceptable
Fluoranthene-d10	89	27-106	09/11/13	Acceptable
Terphenyl-d14	70	35-109	09/11/13	Acceptable

11/6/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 30, 2013
LDC Report Date:	November 19, 2013
Matrix:	Water
Parameters:	Lead
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309014

Sample Identification

MW-303-30-2013
MW-303-30-2013F
MW-303-30-2013MS
MW-303-30-2013MSD

Samples appended with "F" were analyzed for dissolved Lead

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6020A for Lead.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No lead was found in the initial, continuing and preparation blanks.

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XII. Sample Result Verification

All sample result verifications were acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Lead - Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Lead - Laboratory Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Lead - Field Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

ALS Group USA, Corp.
dba ALS Environmental

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309014
Project No.:	14005.066.301	**Date Collected:**	08/30/13
Project Name:	TO 66, Adak LTM 2013	**Date Received:**	09/03/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW-303-30-2013 **Lab Code:** K1309014-001

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.020	0.005	0.002	1.0	09/06/13	09/12/13	29.1		

Comments:

14411 2/13

REVISED
2:11 pm, Nov 21, 2013

ALS Group USA, Corp.
dba ALS Environmental

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309014
Project No.:	14005.066.301	**Date Collected:**	08/30/13
Project Name:	TO 66, Adak LTM 2013	**Date Received:**	09/03/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW-303-30-2013 **Lab Code:** K1309014-001DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.020	0.005	0.002	1.0	09/06/13	09/12/13	29.0		

Comments:

14/11/13

REVISED
2:11 pm, Nov 21, 2013

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 30, 2013
LDC Report Date:	October 17, 2013
Matrix:	Water
Parameters:	Wet Chemistry
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309014

Sample Identification

MW-303-30-2013
MW-303-30-2013DUP

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Standard Method 2320B for Alkalinity and EPA Method 300.0 for Sulfate.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Continuing Calibration

Continuing calibration frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Concentration	Associated Samples
PB (prep blank)	Alkalinity	5.4 mg/L	All samples in SDG K1309014
PB (prep blank)	Alkalinity	5.6 mg/L	All samples in SDG K1309014

Sample concentrations were compared to concentrations detected in the blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the assciated blanks.

No field blanks were identified in this SDG.

IV. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Sample Result Verification

All sample result verifications were acceptable.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Wet Chemistry - Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Wet Chemistry - Field Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/13
Sample Matrix:	Water	**Date Received:**	09/3/13
Analysis Method:	SM 2320 B	**Units:**	mg/L
		Basis:	NA

Alkalinity as CaCO3, Total

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
MW-303-30-2013	K1309014-001	**55.3**	9.0	6.0	3.0	1	09/09/13 17:32	
Method Blank	K1309014-MB1	**5.4 J**	9.0	6.0	3.0	1	09/09/13 17:32	
Method Blank	K1309014-MB2	**5.6 J**	9.0	6.0	3.0	1	09/09/13 17:32	

11/6/13

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/13
Sample Matrix:	Water	**Date Received:**	09/3/13
Analysis Method:	300.0	**Units:**	mg/L
		Basis:	NA

Sulfate

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
MW-303-30-2013	K1309014-001	ND U	0.20	0.04	0.02	2	09/04/13 12:10	
Method Blank	K1309014-MB1	ND U	0.10	0.02	0.01	1	09/04/13 08:47	

11/6/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 30, 2013
LDC Report Date:	October 31, 2013
Matrix:	Water
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309014

Sample Identification

MW-303-30-2013
TB083013C

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK101 for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 25.0%.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound	Concentration	Associated Samples
KWG1310022-5	9/11/13	C6-C10 Gasoline range organics	14 ug/L	All samples in SDG K1309014

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

Sample TB083013C was identified as a trip blank. No gasoline range organic contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Gasoline Range Organics

Sample Name:	MW-303-30-2013	**Units:**	ug/L
Lab Code:	K1309014-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**16000**	DY	1000	250	130	10	09/11/13	09/11/13	KWG1310022	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	98	50-150	09/11/13	Acceptable

11/6/17

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Gasoline Range Organics

Sample Name:	TB083013C	**Units:**	ug/L
Lab Code:	K1309014-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/11/13	09/11/13	KWG1310022	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	50-150	09/11/13	Acceptable

11/6/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 30 through August 31, 2013
LDC Report Date:	October 31, 2013
Matrix:	Sediment/Water
Parameters:	Diesel Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309014

Sample Identification

650-2013
02-231-2013
03-416-2013
03-890-2013
03-421-2013
03-431-2013
651-2013
03-420-2013
NSWSD-7-2013
852S-2013
862S-203
NSWSD-7-2013MS
NSWSD-7-2013MSD

Introduction

This data review covers 2 sediment samples and 11 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK102 for Diesel Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than 25.0% .

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples 03-421-2013 and 03-431-2013 were identified as field duplicates. No diesel range organics were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	03-421-2013	03-431-201	
Diesel range organics C10-C25	3000	3000	0 (≤50)

Adak LTM 2013
Diesel Range Organics - Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	650-2013	**Units:**	ug/L
Lab Code:	K1309014-003	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**2400**	Y	49	20	11	1	09/13/13	09/22/13	KWG1310229	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	50-150	09/22/13	Acceptable

9/11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	02-231-2013	**Units:**	ug/L
Lab Code:	K1309014-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**6000**	Y	49	20	11	1	09/13/13	09/22/13	KWG1310229	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	110	50-150	09/22/13	Acceptable

11/6/17

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	03-416-2013	**Units:**	ug/L
Lab Code:	K1309014-009	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1600**	Y	50	20	11	1	09/13/13	09/21/13	KWG1310229	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	91	50-150	09/21/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	03-890-2013	**Units:**	ug/L
Lab Code:	K1309014-010	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**11000**	Y	50	20	11	1	09/13/13	09/22/13	KWG1310229	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	117	50-150	09/22/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	03-421-2013	**Units:**	ug/L
Lab Code:	K1309014-011	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**3000**	Y	50	20	11	1	09/13/13	09/22/13	KWG1310229	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	98	50-150	09/22/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	03-431-2013	**Units:**	ug/L
Lab Code:	K1309014-012	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**3000**	Y	50	20	11	1	09/13/13	09/22/13	KWG1310229	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	90	50-150	09/22/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	651-2013	**Units:**	ug/L
Lab Code:	K1309014-014	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1300**	Y	49	20	11	1	09/13/13	09/22/13	KWG1310229	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	89	50-150	09/22/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/30/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	03-420-2013	**Units:**	ug/L
Lab Code:	K1309014-017	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**3300**	Y	49	20	11	1	09/13/13	09/22/13	KWG1310229	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	50-150	09/22/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Water	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	NSWSD-7-2013	**Units:**	ug/L
Lab Code:	K1309014-018	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**110**	Y	49	20	11	1	09/13/13	09/21/13	KWG1310229	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	09/21/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Soil	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	852S-2013	**Units:**	mg/Kg
Lab Code:	K1309014-019	**Basis:**	Dry
Extraction Method:	EPA 3550B	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**2000**	Y	9.0	4.5	1.8	1	09/11/13	09/13/13	KWG1309832	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/13/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309014
Project:	TO 66, Adak LTM 2013/14005.066.301	**Date Collected:**	08/31/2013
Sample Matrix:	Soil	**Date Received:**	09/03/2013

Diesel Range Organics

Sample Name:	862S-2013	**Units:**	mg/Kg
Lab Code:	K1309014-020	**Basis:**	Dry
Extraction Method:	EPA 3550B	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1900**	Y	9.2	4.6	1.8	1	09/11/13	09/13/13	KWG1309832	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	83	50-150	09/13/13	Acceptable

11/6/13

Comments:

LDC Report# 30585A51

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	August 30, 2013
LDC Report Date:	October 31, 2013
Matrix:	Water
Parameters:	Methane
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309014

Sample Identification

MW-303-30-2013

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method RSK-175 for Methane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% .

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No methane was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Not required by the method.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Methane - Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Methane - Laboratory Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

Adak LTM 2013
Methane - Field Blank Data Qualification Summary - SDG K1309014

No Sample Data Qualified in this SDG

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Sealaska Environmental Services, LLC**
Client Project ID: **TO 66, Adak LTM 2013 / 14005.066.301** ALS Project ID: K1309014

Methane

Test Code: RSK 175
Instrument ID: HP5890A/GC10/FID
Analyst: Wade Henton
Matrix: Water
Test Notes:

Date(s) Collected: 8/30/13
Date Received: 9/3/13
Date Analyzed: 9/9/13

Client Sample ID	ALS Sample ID	Injection Volume ml(s)	**Result µg/L**	LOQ µg/L	LOD µg/L	MDL µg/L	Data Qualifier
MW-303-30-2013	K1309014-001	0.10	**250**	1.3	0.61	0.30	
Method Control Sample	P130909-MB	0.10	0.61	1.3	0.61	0.30	**U**

The Method Control Sample is laboratory water carried through the entire analytical process.
U = Compound was analyzed for, but not detected above the laboratory detection limit.
LOQ = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

11/6/13

LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 6, 2013

SUBJECT: ADAK LTM 2013, TO 66, Data Validation

Dear Ms. Wunderlich,

Enclosed is the final validation report for the fractions listed below with form 1s. This SDG was received on October 16, 2013. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 30591:

SDG #	Fraction
K1309673	Volatiles, Lead, Gasoline Range Organics, Diesel Range Organics

The data validation was performed under EPA Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2010

Please feel free to contact us if you have any questions.

Sincerely,

Ming-Hwa Hwang
Project Manager/Senior Chemist

Attachment 1

Level IV

LDC #30591 (Sealaska-Poulsbo, WA / Adak LTM 2013, TO 66)

Project #14005.066.301

LDC	SDG#	DATE REC'D	(3) DATE DUE	Short VOA (8260B)		Lead (6020A)		Diss. Lead (6020A)		GRO (101)		DRO (AK102)																									
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1309673	10/16/13	11/06/13	2	0	1	0	1	0	2	0	3	0																								
Total	A/MH			2	0	1	0	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9

Shaded cells indicate Level IV validation (all other cells are ADEC Checklist validation). These sample counts do not inclute MS/MSD, and DUPs

30591ST.wpd

LDC Report# 30591A1

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 10 through September 11, 2013
LDC Report Date:	October 31, 2013
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309673

Sample Identification

01-153-2013
55-145-2013
01-153-2013MS
01-153-2013MSD

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
01-153-2013MS/MSD (01-153-2013)	1,1-Dichloroethene	135 (70-130)	-	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Volatiles - Data Qualification Summary - SDG K1309673

SDG	Sample	Compound	Flag	A or P	Reason
K1309673	01-153-2013	1,1-Dichloroethene	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)

Adak LTM 2013
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Field Blank Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309673
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/10/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Volatile Organic Compounds

Sample Name:	01-153-2013	**Units:**	ug/L
Lab Code:	K1309673-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/23/13	09/23/13	KWG1310377	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/23/13	09/23/13	KWG1310377	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/23/13	09/23/13	KWG1310377	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/23/13	09/23/13	KWG1310377	
Trichloroethene (TCE)	**0.22**	J	0.50	0.10	0.10	1	09/23/13	09/23/13	KWG1310377	
Tetrachloroethene (PCE)	**2.3**		0.50	0.20	0.099	1	09/23/13	09/23/13	KWG1310377	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	85-115	09/23/13	Acceptable
1,2-Dichloroethane-d4	97	70-120	09/23/13	Acceptable
Toluene-d8	100	85-120	09/23/13	Acceptable
4-Bromofluorobenzene	92	75-120	09/23/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309673
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/11/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Volatile Organic Compounds

Sample Name:	55-145-2013	**Units:**	ug/L
Lab Code:	K1309673-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/25/13	09/25/13	KWG1310490	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/25/13	09/25/13	KWG1310490	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/25/13	09/25/13	KWG1310490	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/25/13	09/25/13	KWG1310490	
Trichloroethene (TCE)	**0.13**	J	0.50	0.10	0.10	1	09/25/13	09/25/13	KWG1310490	
Tetrachloroethene (PCE)	**38**		0.50	0.20	0.099	1	09/25/13	09/25/13	KWG1310490	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	85-115	09/25/13	Acceptable
1,2-Dichloroethane-d4	94	70-120	09/25/13	Acceptable
Toluene-d8	96	85-120	09/25/13	Acceptable
4-Bromofluorobenzene	89	75-120	09/25/13	Acceptable

11/6/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 10, 2013
LDC Report Date:	October 22, 2013
Matrix:	Water
Parameters:	Lead
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309673

Sample Identification

MW14-5-2013
MW14-5-2013F
MW14-5-2013MS
MW14-5-2013MSD
MW14-5-2013FMS
MW14-5-2013FMSD

Samples appended with "F" were analyzed for dissolved Lead

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6020A for Lead.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No lead was found in the initial, continuing and preparation blanks.

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XII. Sample Result Verification

All sample result verifications were acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Lead - Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

Adak LTM 2013
Lead - Laboratory Blank Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

Adak LTM 2013
Lead - Field Blank Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309673
Project No.:	14005.066.301	**Date Collected:**	09/10/13
Project Name:	TO66 Adak LTM 2013	**Date Received:**	09/13/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW14-5-2013 **Lab Code:** K1309673-005

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/18/13	09/24/13	28.5		

Comments:

11/6/13

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1309673
Project No.:	14005.066.301	**Date Collected:**	09/10/13
Project Name:	TO66 Adak LTM 2013	**Date Received:**	09/13/13
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW14-5-2013 **Lab Code:** K1309673-005DISS

Analyte	Analysis Method	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6020A	0.030	0.010	0.005	1.0	09/18/13	09/24/13	27.9		

Comments:

11/6/13

LDC Report# 30591A7

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 10, 2013
LDC Report Date:	October 31, 2013
Matrix:	Water
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309673

Sample Identification

TB091013A
MW14-5-2013

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK101 for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 25.0%.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks.

Sample TB091013A was identified as a trip blank. No gasoline range organic contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309673
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/10/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Gasoline Range Organics

Sample Name:	TB091013A	**Units:**	ug/L
Lab Code:	K1309673-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/22/13	09/22/13	KWG1310329	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	90	50-150	09/22/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309673
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/10/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Gasoline Range Organics

Sample Name:	MW14-5-2013	**Units:**	ug/L
Lab Code:	K1309673-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**4700**	Y	100	25	13	1	09/22/13	09/22/13	KWG1310329	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	134	50-150	09/22/13	Acceptable

11/6/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 10 through September 11, 2013
LDC Report Date:	October 31, 2013
Matrix:	Water
Parameters:	Diesel Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309673

Sample Identification

MW-187-1-2013
03-155-2013
MW14-5-2013

Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK102 for Diesel Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than 25.0% .

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Diesel Range Organics - Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1309673

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309673
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/11/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	MW-187-1-2013	**Units:**	ug/L
Lab Code:	K1309673-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**2800**	Y	48	20	11	1	09/24/13	09/27/13	KWG1310598	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	78	50-150	09/27/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309673
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/11/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	03-155-2013	**Units:**	ug/L
Lab Code:	K1309673-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**4400**	DY	95	40	22	2	09/24/13	09/27/13	KWG1310598	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/27/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309673
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/10/2013
Sample Matrix:	Water	**Date Received:**	09/13/2013

Diesel Range Organics

Sample Name:	MW14-5-2013	**Units:**	ug/L
Lab Code:	K1309673-005	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**2900**	Y	49	20	11	1	09/24/13	09/27/13	KWG1310598	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	75	50-150	09/27/13	Acceptable

11/6/13

Comments:

LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 6, 2013

SUBJECT: ADAK LTM 2013, TO 66, Data Validation

Dear Ms. Wunderlich,

Enclosed is the final validation report for the fractions listed below with form 1s. This SDG was received on October 29, 2013. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 30700:

SDG #	Fraction
K1309326	Volatiles, Polynuclear Aromatic Hydrocarbons, Gasoline Range Organics, Diesel Range Organics

The data validation was performed under EPA Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008

Please feel free to contact us if you have any questions.

Sincerely,

Ming-Hwa Hwang
Project Manager/Senior Chemist

Attachment 1

Level IV

LDC #30700 (Sealaska-Poulsbo, WA / Adak LTM 2013, TO 66)

Project #14005.066.301

LDC	SDG#	DATE REC'D	(3) DATE DUE	BTEX (8260B)		PAHs (8270D -SIM)		GRO (101)		DRO (AK102)																											
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1309326	10/29/13	11/19/13	8	3	2	0	12	0	2	0																										
Total	A/MH			8	3	2	0	12	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27

Shaded cells indicate Level IV validation (all other cells are ADEC Checklist validation). These sample counts do not inclute MS/MSD, and DUPs

30700ST.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 6 through September 7, 2013
LDC Report Date:	November 4, 2013
Matrix:	Sediment/Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309326

Sample Identification

TB090613B
TFB-MW-4B-2013
TB090613A
NL-04-2013
05-735-2013
05-745-2013
14-113-2013
14-210-2013
TB090613AS
NL-04S-2013
NL-14S-2013
NL-04S-2013MS
NL-04S-2013MSD
14-210-2013MS
14-210-2013MSD

Introduction

This data review covers 5 sediment samples and 10 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Samples TB090613B, TB090613A, and TB090613AS were identified as trip blanks. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB090613AS	9/6/13	Toluene	0.035 mg/Kg	NL-04S-2013 NL-14S-2013

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples 05-735-2013 and 05-745-2013 and samples NL-04S-2013 and NL-14S-2013 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	05-735-2013	05-745-2013	
Vinyl chloride	3.2	3.6	12 (≤50)
1,1-Dichloroethene	0.73	0.54	30 (≤50)
trans-1,2-Dichloroethene	11	12	9 (≤50)
cis-1,2-Dichloroethene	180	210	15 (≤50)
Trichloroethene	1.2	1.0	18 (≤50)
Tetrachloroethene	0.58	0.55	5 (≤50)

Adak LTM 2013
Volatiles - Data Qualification Summary - SDG K1309326

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1309326

No Sample Data Qualified in this SDG

Adak LTM 2013
Volatiles - Field Blank Data Qualification Summary - SDG K1309326

No Sample Data Qualified in this SDG

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309326
Date Collected: 09/06/2013
Date Received: 09/09/2013

Volatile Organic Compounds

Sample Name: TB090613B
Lab Code: K1309326-007

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/13/13	09/13/13	KWG1309981	
Toluene	ND	U	0.50	0.10	0.054	1	09/13/13	09/13/13	KWG1309981	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/13/13	09/13/13	KWG1309981	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/13/13	09/13/13	KWG1309981	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/13/13	09/13/13	KWG1309981	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	103	70-120	09/13/13	Acceptable
Dibromofluoromethane	105	85-115	09/13/13	Acceptable
Toluene-d8	105	85-120	09/13/13	Acceptable
4-Bromofluorobenzene	101	75-120	09/13/13	Acceptable

11/6/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309326
Date Collected: 09/06/2013
Date Received: 09/09/2013

Volatile Organic Compounds

Sample Name: TFB-MW-4B-2013
Lab Code: K1309326-008

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**20**	D	10	2.0	1.3	20	09/14/13	09/14/13	KWG1309981	
Toluene	**4000**	D	100	20	11	200	09/14/13	09/14/13	KWG1309981	
Ethylbenzene	**1900**	D	100	20	10	200	09/14/13	09/14/13	KWG1309981	
m,p-Xylenes	**11000**	D	100	40	22	200	09/14/13	09/14/13	KWG1309981	
o-Xylene	**2900**	D	100	40	15	200	09/14/13	09/14/13	KWG1309981	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	70-120	09/14/13	Acceptable
Dibromofluoromethane	101	85-115	09/14/13	Acceptable
Toluene-d8	106	85-120	09/14/13	Acceptable
4-Bromofluorobenzene	100	75-120	09/14/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Volatile Organic Compounds

Sample Name:	TB090613A	**Units:**	ug/L
Lab Code:	K1309326-011	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/17/13	09/17/13	KWG1310085	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/17/13	09/17/13	KWG1310085	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/17/13	09/17/13	KWG1310085	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/17/13	09/17/13	KWG1310085	
Benzene	ND	U	0.50	0.10	0.062	1	09/17/13	09/17/13	KWG1310085	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/17/13	09/17/13	KWG1310085	
Toluene	ND	U	0.50	0.10	0.054	1	09/17/13	09/17/13	KWG1310085	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/17/13	09/17/13	KWG1310085	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/17/13	09/17/13	KWG1310085	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/17/13	09/17/13	KWG1310085	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/17/13	09/17/13	KWG1310085	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	09/17/13	Acceptable
1,2-Dichloroethane-d4	93	70-120	09/17/13	Acceptable
Toluene-d8	96	85-120	09/17/13	Acceptable
4-Bromofluorobenzene	98	75-120	09/17/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Volatile Organic Compounds

Sample Name:	NL-04-2013	**Units:**	ug/L
Lab Code:	K1309326-013	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.50	0.10	0.062	1	09/13/13	09/13/13	KWG1309981	
Toluene	ND	U	0.50	0.10	0.054	1	09/13/13	09/13/13	KWG1309981	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/13/13	09/13/13	KWG1309981	
m,p-Xylenes	0.17	J	0.50	0.20	0.11	1	09/13/13	09/13/13	KWG1309981	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/13/13	09/13/13	KWG1309981	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	103	70-120	09/13/13	Acceptable
Dibromofluoromethane	106	85-115	09/13/13	Acceptable
Toluene-d8	106	85-120	09/13/13	Acceptable
4-Bromofluorobenzene	100	75-120	09/13/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Volatile Organic Compounds

Sample Name:	05-735-2013	**Units:**	ug/L
Lab Code:	K1309326-016	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	**3.2**		0.50	0.10	0.075	1	09/19/13	09/19/13	KWG1310213	
1,1-Dichloroethene	**0.73**		0.50	0.20	0.080	1	09/19/13	09/19/13	KWG1310213	
trans-1,2-Dichloroethene	**11**		0.50	0.20	0.072	1	09/19/13	09/19/13	KWG1310213	
cis-1,2-Dichloroethene	**180**	D	5.0	2.0	0.67	10	09/19/13	09/19/13	KWG1310213	
Trichloroethene (TCE)	**1.2**		0.50	0.10	0.10	1	09/19/13	09/19/13	KWG1310213	
Tetrachloroethene (PCE)	**0.58**		0.50	0.20	0.099	1	09/19/13	09/19/13	KWG1310213	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	09/19/13	Acceptable
1,2-Dichloroethane-d4	93	70-120	09/19/13	Acceptable
Toluene-d8	94	85-120	09/19/13	Acceptable
4-Bromofluorobenzene	98	75-120	09/19/13	Acceptable

11/6/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309326
Date Collected: 09/06/2013
Date Received: 09/09/2013

Volatile Organic Compounds

Sample Name: 05-745-2013
Lab Code: K1309326-017

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	**3.6**		0.50	0.10	0.075	1	09/18/13	09/18/13	KWG1310145	
1,1-Dichloroethene	**0.54**		0.50	0.20	0.080	1	09/18/13	09/18/13	KWG1310145	
trans-1,2-Dichloroethene	**12**		0.50	0.20	0.072	1	09/18/13	09/18/13	KWG1310145	
cis-1,2-Dichloroethene	**210**	D	5.0	2.0	0.67	10	09/18/13	09/18/13	KWG1310145	
Trichloroethene (TCE)	**1.0**		0.50	0.10	0.10	1	09/18/13	09/18/13	KWG1310145	
Tetrachloroethene (PCE)	**0.55**		0.50	0.20	0.099	1	09/18/13	09/18/13	KWG1310145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	09/18/13	Acceptable
1,2-Dichloroethane-d4	103	70-120	09/18/13	Acceptable
Toluene-d8	91	85-120	09/18/13	Acceptable
4-Bromofluorobenzene	87	75-120	09/18/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Volatile Organic Compounds

Sample Name:	14-113-2013	**Units:**	ug/L
Lab Code:	K1309326-019	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	**6.9**		0.50	0.10	0.062	1	09/14/13	09/14/13	KWG1309981	
Toluene	**2.0**		0.50	0.10	0.054	1	09/14/13	09/14/13	KWG1309981	
Ethylbenzene	**12**		0.50	0.10	0.050	1	09/14/13	09/14/13	KWG1309981	
m,p-Xylenes	**630**	D	5.0	2.0	1.1	10	09/17/13	09/17/13	KWG1310085	
o-Xylene	**1.0**		0.50	0.20	0.074	1	09/14/13	09/14/13	KWG1309981	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	102	70-120	09/14/13	Acceptable
Dibromofluoromethane	103	85-115	09/14/13	Acceptable
Toluene-d8	112	85-120	09/14/13	Acceptable
4-Bromofluorobenzene	99	75-120	09/14/13	Acceptable

11/6/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309326
Date Collected: 09/07/2013
Date Received: 09/09/2013

Volatile Organic Compounds

Sample Name: 14-210-2013
Lab Code: K1309326-020

Extraction Method: EPA 5030B
Analysis Method: 8260C

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	Ui	0.50	0.19	0.19	1	09/13/13	09/13/13	KWG1309981	
Toluene	**0.10**	J	0.50	0.10	0.054	1	09/13/13	09/13/13	KWG1309981	
Ethylbenzene	**0.060**	J	0.50	0.10	0.050	1	09/13/13	09/13/13	KWG1309981	
m,p-Xylenes	**0.40**	J	0.50	0.20	0.11	1	09/13/13	09/13/13	KWG1309981	
o-Xylene	~~ND~~	U	0.50	0.20	0.074	1	09/13/13	09/13/13	KWG1309981	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	106	70-120	09/13/13	Acceptable
Dibromofluoromethane	104	85-115	09/13/13	Acceptable
Toluene-d8	111	85-120	09/13/13	Acceptable
4-Bromofluorobenzene	100	75-120	09/13/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Sediment	**Date Received:**	09/09/2013

Volatile Organic Compounds

Sample Name:	TB090613AS	**Units:**	mg/Kg
Lab Code:	K1309326-012	**Basis:**	Dry
Extraction Method:	EPA 5035A/5030B	**Level:**	Med
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.050	0.010	0.0062	1	09/14/13	09/14/13	KWG1309982	
Toluene	**0.035**	J	0.050	0.010	0.0054	1	09/14/13	09/14/13	KWG1309982	
Ethylbenzene	ND	U	0.050	0.010	0.0050	1	09/14/13	09/14/13	KWG1309982	
m,p-Xylenes	ND	U	0.050	0.020	0.011	1	09/14/13	09/14/13	KWG1309982	
o-Xylene	ND	U	0.050	0.020	0.0074	1	09/14/13	09/14/13	KWG1309982	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	105	68-119	09/14/13	Acceptable
1,2-Dichloroethane-d4	103	64-142	09/14/13	Acceptable
Toluene-d8	107	85-115	09/14/13	Acceptable
4-Bromofluorobenzene	100	85-120	09/14/13	Acceptable

K 11/4/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Sediment

Service Request: K1309326
Date Collected: 09/06/2013
Date Received: 09/09/2013

Volatile Organic Compounds

Sample Name: NL-04S-2013
Lab Code: K1309326-014

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 5035A/5030B
Analysis Method: 8260C

Level: Med

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.54	0.11	0.066	1	09/14/13	09/14/13	KWG1309982	
Toluene	ND	U	0.54	0.11	0.058	1	09/14/13	09/14/13	KWG1309982	
Ethylbenzene	ND	U	0.54	0.11	0.054	1	09/14/13	09/14/13	KWG1309982	
m,p-Xylenes	ND	U	0.54	0.22	0.12	1	09/14/13	09/14/13	KWG1309982	
o-Xylene	ND	U	0.54	0.22	0.079	1	09/14/13	09/14/13	KWG1309982	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	106	68-119	09/14/13	Acceptable
1,2-Dichloroethane-d4	104	64-142	09/14/13	Acceptable
Toluene-d8	108	85-115	09/14/13	Acceptable
4-Bromofluorobenzene	98	85-120	09/14/13	Acceptable

11/6/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Sediment

Service Request: K1309326
Date Collected: 09/06/2013
Date Received: 09/09/2013

Volatile Organic Compounds

Sample Name: NL-14S-2013
Lab Code: K1309326-015

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 5035A/5030B
Analysis Method: 8260C

Level: Med

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzene	ND	U	0.56	0.12	0.070	1	09/14/13	09/14/13	KWG1309982	
Toluene	ND	U	0.56	0.12	0.061	1	09/14/13	09/14/13	KWG1309982	
Ethylbenzene	ND	U	0.56	0.12	0.056	1	09/14/13	09/14/13	KWG1309982	
m,p-Xylenes	ND	U	0.56	0.23	0.13	1	09/14/13	09/14/13	KWG1309982	
o-Xylene	ND	U	0.56	0.23	0.083	1	09/14/13	09/14/13	KWG1309982	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	106	68-119	09/14/13	Acceptable
1,2-Dichloroethane-d4	104	64-142	09/14/13	Acceptable
Toluene-d8	106	85-115	09/14/13	Acceptable
4-Bromofluorobenzene	99	85-120	09/14/13	Acceptable

11/6/13

Comments:

LDC Report# 30700A2b

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 6, 2013
LDC Report Date:	November 6, 2013
Matrix:	Water
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309326

Sample Identification

NL-04-2013
14-113-2013

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270D using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG1309726-3	9/10/13	Naphthalene 2-Methylnaphthalene	0.0055 ug/L 0.0031 ug/L	All samples in SDG K1309326

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
NL-04-2013	Naphthalene 2-Methylnaphthalene	0.024 ug/L 0.0026 ug/L	0.024U ug/L 0.020U ug/L

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG1309726-1/2 (All samples in SDG K1309326)	Benzo(a)pyrene	112 (55-110)	112 (55-110)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1309326

SDG	Sample	Compound	Flag	A or P	Reason
K1309326	NL-04-2013 14-113-2013	Benzo(a)pyrene	J (all detects)	P	Laboratory control samples (%R)

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1309326

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K1309326	NL-04-2013	Naphthalene 2-Methylnaphthalene	0.024U ug/L 0.020U ug/L	A

Adak LTM 2013
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1309326

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	NL-04-2013	**Units:**	ug/L
Lab Code:	K1309326-013	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.024**	U	0.020	0.0050	0.0030	1	09/10/13	09/14/13	KWG1309726	
2-Methylnaphthalene	**0.0026**	J, 0.020 U	0.020	0.0050	0.0023	1	09/10/13	09/14/13	KWG1309726	
Acenaphthylene	ND	U	0.020	0.0050	0.0034	1	09/10/13	09/14/13	KWG1309726	
Acenaphthene	ND	U	0.020	0.0050	0.0044	1	09/10/13	09/14/13	KWG1309726	
Fluorene	ND	U	0.020	0.0050	0.0038	1	09/10/13	09/14/13	KWG1309726	
Phenanthrene	ND	U	0.020	0.0050	0.0080	1	09/10/13	09/14/13	KWG1309726	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/10/13	09/14/13	KWG1309726	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/10/13	09/14/13	KWG1309726	
Pyrene	ND	U	0.020	0.0050	0.0035	1	09/10/13	09/14/13	KWG1309726	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/10/13	09/14/13	KWG1309726	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/10/13	09/14/13	KWG1309726	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/10/13	09/14/13	KWG1309726	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/10/13	09/14/13	KWG1309726	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/10/13	09/14/13	KWG1309726	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/10/13	09/14/13	KWG1309726	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/10/13	09/14/13	KWG1309726	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/10/13	09/14/13	KWG1309726	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	96	28-98	09/14/13	Acceptable
Fluoranthene-d10	101	31-105	09/14/13	Acceptable
Terphenyl-d14	110	27-112	09/14/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Polynuclear Aromatic Hydrocarbons

Sample Name:	14-113-2013	**Units:**	ug/L
Lab Code:	K1309326-019	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270D SIM		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.20**		0.019	0.0050	0.0030	1	09/10/13	09/14/13	KWG1309726	
2-Methylnaphthalene	**0.18**		0.019	0.0050	0.0023	1	09/10/13	09/14/13	KWG1309726	
Acenaphthylene	**0.0077**	JX	0.019	0.0050	0.0034	1	09/10/13	09/14/13	KWG1309726	
Acenaphthene	**0.018**	J	0.019	0.0050	0.0044	1	09/10/13	09/14/13	KWG1309726	
Fluorene	**0.038**		0.019	0.0050	0.0038	1	09/10/13	09/14/13	KWG1309726	
Phenanthrene	**0.031**		0.019	0.0050	0.0080	1	09/10/13	~~09/14/13~~	KWG1309726	
Anthracene	ND	U	0.019	0.0050	0.0036	1	09/10/13	09/14/13	KWG1309726	
Fluoranthene	**0.0058**	J	0.019	0.0050	0.0044	1	09/10/13	09/14/13	KWG1309726	
Pyrene	**0.0056**	J	0.019	0.0050	0.0035	1	09/10/13	09/14/13	KWG1309726	
Benz(a)anthracene	**0.0029**	JX	0.019	0.0050	0.0026	1	09/10/13	09/14/13	KWG1309726	
Chrysene	ND	U	0.019	0.0050	0.0034	1	09/10/13	09/14/13	KWG1309726	
Benzo(b)fluoranthene	ND	U	0.019	0.0050	0.0023	1	09/10/13	09/14/13	KWG1309726	
Benzo(k)fluoranthene	ND	U	0.019	0.0050	0.0025	1	09/10/13	09/14/13	KWG1309726	
Benzo(a)pyrene	ND	U	0.019	0.0050	0.0043	1	09/10/13	09/14/13	KWG1309726	
Indeno(1,2,3-cd)pyrene	ND	U	0.019	0.0050	0.0026	1	09/10/13	09/14/13	KWG1309726	
Dibenz(a,h)anthracene	ND	U	0.019	0.0050	0.0025	1	09/10/13	09/14/13	KWG1309726	
Benzo(g,h,i)perylene	ND	U	0.019	0.0050	0.0029	1	09/10/13	09/14/13	KWG1309726	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	88	28-98	09/14/13	Acceptable
Fluoranthene-d10	96	31-105	09/14/13	Acceptable
Terphenyl-d14	101	27-112	09/14/13	Acceptable

11/6/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 5 through September 7, 2013
LDC Report Date:	November 4, 2013
Matrix:	Water
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309326

Sample Identification

TB090513B
04-701-2013
04-213-2013
04-210-2013
04-202-2013
TFB-MW-4B-2013
04-204-2013
TB090613A
NL-04-2013
14-100-2013
14-113-2013
14-210-2013
NL-04-2013MSD
NL-04-2013MSD

Introduction

This data review covers 14 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK101 for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 25.0%.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound	Concentration	Associated Samples
KWG1310210-3	9/16/13	C6-C10 Gasoline range organics	13 ug/L	TB090513B 04-701-2013 04-213-2013 04-210-2013 04-202-2013
KWG1310227-5	9/19/13	C6-C10 Gasoline range organics	18 ug/L	TFB-MW-4B-2013 04-204-2013 TB090613A NL-04-2013 14-100-2013 14-113-2013 14-210-2013

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

Samples TB090513B, TB090613A and TB090613AS were identified as trip blanks. No gasoline range organic contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1309326

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309326

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1309326

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Gasoline Range Organics

Sample Name:	TB090513B	**Units:**	ug/L
Lab Code:	K1309326-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/16/13	09/16/13	KWG1310210	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	93	50-150	09/16/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Gasoline Range Organics

Sample Name:	04-701-2013	**Units:**	ug/L
Lab Code:	K1309326-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/16/13	09/16/13	KWG1310210	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	93	50-150	09/16/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Gasoline Range Organics

Sample Name:	04-213-2013	**Units:**	ug/L
Lab Code:	K1309326-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**3200**	Y	100	25	13	1	09/16/13	09/16/13	KWG1310210	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	95	50-150	09/16/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Gasoline Range Organics

Sample Name:	04-210-2013	**Units:**	ug/L
Lab Code:	K1309326-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**5500**	Y	100	25	13	1	09/16/13	09/16/13	KWG1310210	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	50-150	09/16/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Gasoline Range Organics

Sample Name:	04-202-2013	**Units:**	ug/L
Lab Code:	K1309326-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**4100**	Y	100	25	13	1	09/16/13	09/16/13	KWG1310210	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	94	50-150	09/16/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Gasoline Range Organics

Sample Name:	TFB-MW-4B-2013	**Units:**	ug/L
Lab Code:	K1309326-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**43000**	DZ	2000	500	260	20	09/19/13	09/20/13	KWG1310227	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	95	50-150	09/20/13	Acceptable

M 6/17

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309326
Date Collected: 09/06/2013
Date Received: 09/09/2013

Gasoline Range Organics

Sample Name: 04-204-2013
Lab Code: K1309326-009

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: AK101

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**490**	Y	100	25	13	1	09/19/13	09/19/13	KWG1310227	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	95	50-150	09/19/13	Acceptable

11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Gasoline Range Organics

Sample Name:	TB090613A	**Units:**	ug/L
Lab Code:	K1309326-011	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/19/13	09/19/13	KWG1310227	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	98	50-150	09/19/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Gasoline Range Organics

Sample Name:	NL-04-2013	**Units:**	ug/L
Lab Code:	K1309326-013	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	100	25	13	1	09/19/13	09/19/13	KWG1310227	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	96	50-150	09/19/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/07/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Gasoline Range Organics

Sample Name:	14-100-2013	**Units:**	ug/L
Lab Code:	K1309326-018	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**1600**	Z	100	25	13	1	09/19/13	09/19/13	KWG1310227	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	50-150	09/19/13	Acceptable

11/6/13

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Gasoline Range Organics

Sample Name:	14-113-2013	**Units:**	ug/L
Lab Code:	K1309326-019	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**2800**	Z	100	25	13	1	09/19/13	09/19/13	KWG1310227	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	96	50-150	09/19/13	Acceptable

11/6/13

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO66 Adak LTM 2013/14005.066.301
Sample Matrix: Water

Service Request: K1309326
Date Collected: 09/07/2013
Date Received: 09/09/2013

Gasoline Range Organics

Sample Name: 14-210-2013
Lab Code: K1309326-020

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: AK101

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**3200**	Z	100	25	13	1	09/19/13	09/19/13	KWG1310227	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	99	50-150	09/19/13	Acceptable

11/6/13

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	September 5 through September 6, 2013
LDC Report Date:	November 1, 2013
Matrix:	Water
Parameters:	Diesel Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1309326

Sample Identification

SP4-3-2013
601-2013

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK102 for Diesel Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than 25.0% .

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Adak LTM 2013
Diesel Range Organics - Data Qualification Summary - SDG K1309326

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1309326

No Sample Data Qualified in this SDG

Adak LTM 2013
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1309326

No Sample Data Qualified in this SDG

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/06/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Diesel Range Organics

Sample Name:	SP4-3-2013	**Units:**	ug/L
Lab Code:	K1309326-006	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**3800**	Y	49	20	11	1	09/11/13	09/19/13	KWG1310186	

Surrogate Name	%Rec	Control Limits	~~Date~~ Analyzed	Note
o-Terphenyl	80	50-150	09/19/13	Acceptable

K 11/6/13

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1309326
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	09/05/2013
Sample Matrix:	Water	**Date Received:**	09/09/2013

Diesel Range Organics

Sample Name:	601-2013	**Units:**	ug/L
Lab Code:	K1309326-010	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1900**	Y	48	20	11	1	09/11/13	09/20/13	KWG1310186	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	87	50-150	09/20/13	Acceptable

11/6/13

Comments:

LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 20, 2013

SUBJECT: ADAK LTM 2013, TO 66, Data Validation

Dear Ms. Wunderlich,

Enclosed is the final validation report for the fraction listed below with form 1s. This SDG was received on November 5, 2013. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 30749:

SDG #	Fraction
K1311688	Gasoline Range Organics

The data validation was performed under EPA Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008

Please feel free to contact us if you have any questions.

Sincerely,

Ming-Hwa Hwang
Project Manager/Senior Chemist

Attachment 1

Level IV

LDC #30749 (Sealaska-Poulsbo, WA / Adak LTM 2013, TO 66)

Project #14005.066.301

LDC	SDG#	DATE REC'D	(3) DATE DUE	GRO (101)																																			
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1311688	11/05/13	11/26/13	0	3																																		
Total	T/MH			0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Shaded cells indicate Level IV validation (all other cells are ADEC Checklist validation). These sample counts do not inclute MS/MSD, and DUPs

30749ST.wpd

LDC Report# 30749A7

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2013
Collection Date:	October 25, 2013
LDC Report Date:	November 20, 2013
Matrix:	Sediment
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1311688

Sample Identification

TB102513
NL-04S-2013-R
NL-14S-2013-R
NL-04S-2013-RMS
NL-04S-2013-RMSD

Introduction

This data review covers 5 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Method AK101 for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 25.0%.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 25.0% for all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks.

Sample TB102513 was identified as a trip blank. No gasoline range organic contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation

All compound quantitations were within validation criteria.

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples NL-04S-2013-R and NL-14S-2013-R were identified as field duplicates. No gasoline range organics were detected in any of the samples

Adak LTM 2013
Gasoline Range Organics - Data Qualification Summary - SDG K1311688

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1311688

No Sample Data Qualified in this SDG

Adak LTM 2013
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1311688

No Sample Data Qualified in this SDG

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1311688
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	10/25/2013
Sample Matrix:	Sediment	**Date Received:**	10/28/2013

Gasoline Range Organics

Sample Name:	TB102513	**Units:**	mg/Kg
Lab Code:	K1311688-001	**Basis:**	Dry
Extraction Method:	EPA 5035A/5030B	**Level:**	Med
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	5.0	2.5	1.5	1	10/25/13	10/28/13	KWG1312046	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	91	50-150	10/28/13	Acceptable

Comments: 11/4/2013

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1311688
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	10/25/2013
Sample Matrix:	Sediment	**Date Received:**	10/28/2013

Gasoline Range Organics

Sample Name:	NL-04S-2013-R	**Units:**	mg/Kg
Lab Code:	K1311688-002	**Basis:**	Dry
Extraction Method:	EPA 5035A/5030B	**Level:**	Med
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	52	26	16	1	10/25/13	10/28/13	KWG1312046	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	88	50-150	10/28/13	Acceptable

Comments: 14NOV2013

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1311688
Project:	TO66 Adak LTM 2013/14005.066.301	**Date Collected:**	10/25/2013
Sample Matrix:	Sediment	**Date Received:**	10/28/2013

Gasoline Range Organics

Sample Name:	NL-14S-2013-R	**Units:**	mg/Kg
Lab Code:	K1311688-003	**Basis:**	Dry
Extraction Method:	EPA 5035A/5030B	**Level:**	Med
Analysis Method:	AK101		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	16	7.8	4.7	1	10/25/13	10/28/13	KWG1312046	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	82	50-150	10/28/13	Acceptable

Comments: 14H 11/20/13

APPENDIX G

DATA QUALITY ASSESSMENT SUMMARIES

Table G-1. Relative Percent Differences between Parent Sample/Field Duplicate Pairs for the 2013 Monitoring (Water Samples)

Parent Sample/ Field Duplicate Location	Analyte	Parent Sample Concentration (µg/L)	Field Duplicate Concentration (µg/L)	RPD (%)
Groundwater Sites – Groundwater:				
02-231	Benzene	21	22	4.7
02-231	Toluene	2.3	2.3	0
02-231	Ethylbenzene	60	59	1.7
02-231	m,p-Xylenes	170 D	170 D	0
02-231	o-Xylene	6.7	6.7	0
02-231	2-Methylnaphthalene	76 D	76 D	0
02-231	Acenaphthene	1.4	1.4	0
02-231	Acenaphthylene	0.44 U	0.43 U	NC
02-231	Anthracene	0.020 U	0.020 U	NC
02-231	Benzo(a)anthracene	0.020 U	0.020 U	NC
02-231	Benzo(a)pyrene	0.020 U	0.020 U	NC
02-231	Benzo(b)fluoranthene	0.020 U	0.020 U	NC
02-231	Benzo(g,h,i)perylene	0.020 U	0.020 U	NC
02-231	Benzo(k)fluoranthene	0.020 U	0.020 U	NC
02-231	Chrysene	0.020 U	0.020 U	NC
02-231	Dibenzo(a,h)anthracene	0.020 U	0.020 U	NC
02-231	Fluoranthene	0.018 JX	0.020 U	NC
02-231	Fluorene	3.6	3.5	2.8
02-231	Indeno(1,2,3-cd)pyrene	0.020 U	0.020 U	NC
02-231	Naphthalene	130 D	130 D	0
02-231	Phenanthrene	1.2	1.2	0
02-231	Pyrene	0.019 JX	0.014 JX	30.3
03-107	Benzene	2.8 D	2.9 D	3.5
03-107	GRO	6,100 Y	5,900 Y	3.3
03-107	Lead, dissolved	14.8	15.2	2.7
03-107	Lead, total	14.7	14.2	3.5
03-107	Alkalinity	48,900	50,000	2.2
03-107	Methane	610	650	6.3
03-107	Sulfate	200 U	200 U	NC
03-107	Carbon dioxide (test kit analysis)	13,000	13,000	0
03-107	Dissolved oxygen (test kit analysis)	150	150	0
03-107	Ferrous iron (test kit analysis)	25,000	25,000	0
03-421	DRO	3,000 Y	3,000 Y	0
04-100	GRO	2,900 Y	3,000 Y	3.4
04-290	DRO	5,000 Y	4,500 Y	10.5
05-735	1,1-Dichloroethene	0.73	0.54	29.9
05-735	cis-1,2-Dichloroethene	180 D	210 D	15.4
05-735	trans-1,2-Dichloroethene	11	12	8.7
05-735	Tetrachloroethene	0.58	0.55	5.3
05-735	Trichloroethene	1.2	1.0	18.2
05-735	Vinyl chloride	3.2	3.6	11.8
MRP-MW2	Benzene	94 D	97 D	3.1
MRP-MW2	Toluene	6.1 D	6.4 D	4.8
MRP-MW2	Ethylbenzene	310 D	390 D	22.9
MRP-MW2	m,p-Xylenes	1,500 D	1,800 D	18.2
MRP-MW2	o-Xylene	5.0 D	4.9 D	2.0

Table G-1. Relative Percent Differences between Parent Sample/Field Duplicate Pairs for the 2013 Monitoring (Water Samples) (continued)

Parent Sample/ Field Duplicate Location	Analyte	Parent Sample Concentration (µg/L)	Field Duplicate Concentration (µg/L)	RPD (%)
MRP-MW8	DRO	3,600 Y	3,300 Y	8.7
MW-1451-2	Alkalinity	121,000	116,000	4.2
MW-1451-2	Methane	10,000	9,200	8.3
MW-1451-2	Sulfate	69,600	64,000	8.4
MW-303-42	Carbon dioxide (test kit analysis)	13,000	13,000	0
MW-303-42	Dissolved oxygen (test kit analysis)	700	700	0
MW-303-42	Ferrous iron (test kit analysis)	25,000	25,000	0
Groundwater Sites – Surface Water:				
NL-08	DRO	240 Y	220 Y	8.7
NL-09	Benzene	0.74	0.62	17.6
NL-09	Toluene	2.9	2.5	14.8
NL-09	Ethylbenzene	8.0	7.0	13.3
NL-09	m,p-Xylenes	5.9	5.1	14.5
NL-09	o-Xylene	0.96	0.91	5.3
NL-09	2-Methylnaphthalene	0.027	0.018 J	40.0
NL-09	Acenaphthene	0.023	0.018 J	24.4
NL-09	Acenaphthylene	0.020 U	0.026 U	NC
NL-09	Anthracene	0.020 U	0.026 U	NC
NL-09	Benzo(a)anthracene	0.020 U	0.026 U	NC
NL-09	Benzo(a)pyrene	0.020 U	0.026 U	NC
NL-09	Benzo(b)fluoranthene	0.020 U	0.026 U	NC
NL-09	Benzo(g,h,i)perylene	0.020 U	0.026 U	NC
NL-09	Benzo(k)fluoranthene	0.020 U	0.026 U	NC
NL-09	Chrysene	0.020 U	0.026 U	NC
NL-09	Dibenzo(a,h)anthracene	0.020 U	0.026 U	NC
NL-09	Fluoranthene	0.020 U	0.026 U	NC
NL-09	Fluorene	0.056	0.045	21.8
NL-09	Indeno(1,2,3-cd)pyrene	0.020 UJ	0.026 UJ	NC
NL-09	Naphthalene	0.25 X	0.15 X	50.0
NL-09	Phenanthrene	0.013 J	0.013 J	0
NL-09	Pyrene	0.020 U	0.026 U	NC
NL-09	GRO	130 Y	120 Y	8.0
Landfill Sites – Groundwater:				
A-2	Chloromethane	0.50 U	0.50 U	NC
A-2	Vinyl chloride	0.50 U	0.50 U	NC
A-2	Chloroethane	0.50 U	0.50 U	NC
A-2	1,1-Dichloroethene	0.50 U	0.50 U	NC
A-2	Acetone	20 U	20 U	NC
A-2	Carbon disulfide	0.50 U	0.50 U	NC
A-2	Methylene chloride	2.0 U	2.0 U	NC
A-2	trans-1,2-Dichloroethene	0.50 U	0.50 U	NC
A-2	1,1-Dichloroethane	0.50 U	0.50 U	NC
A-2	cis-1,2-Dichloroethene	0.50 U	0.50 U	NC
A-2	1,1,1-Trichloroethane	0.50 U	0.50 U	NC
A-2	Carbon tetrachloride	0.50 U	0.50 U	NC
A-2	Benzene	0.50 U	0.50 U	NC
A-2	1,2-Dichloroethane	0.50 U	0.50 U	NC

Table G-1. Relative Percent Differences between Parent Sample/Field Duplicate Pairs for the 2013 Monitoring (Water Samples) (continued)

Parent Sample/ Field Duplicate Location	Analyte	Parent Sample Concentration (µg/L)	Field Duplicate Concentration (µg/L)	RPD (%)
A-2	Trichloroethene	0.50 U	0.50 U	NC
A-2	1,2-Dichloropropane	0.50 U	0.50 U	NC
A-2	Toluene	0.50 U	0.50 U	NC
A-2	1,1,2-Trichloroethane	0.50 U	0.50 U	NC
A-2	Tetrachloroethene	0.50 U	0.50 U	NC
A-2	1,2-Dibromoethane	2.0 U	2.0 U	NC
A-2	Chlorobenzene	0.50 U	0.50 U	NC
A-2	Ethylbenzene	0.50 U	0.50 U	NC
A-2	m,p-Xylenes	0.50 U	0.50 U	NC
A-2	o-Xylene	0.50 U	0.50 U	NC
A-2	Styrene	0.50 U	0.50 U	NC
A-2	1,3-Dichlorobenzene	0.50 U	0.50 U	NC
A-2	1,4-Dichlorobenzene	0.50 U	0.50 U	NC
A-2	1,2-Dichlorobenzene	0.50 U	0.50 U	NC
A-2	1,2-Dibromo-3-chloropropane	2.0 U	2.0 U	NC
A-2	1,2,4-Trichlorobenzene	2.0 U	2.0 U	NC
A-2	Aluminum, dissolved	4.3	4.4	2.3
A-2	Antimony, dissolved	0.03 J	0.05 U	NC
A-2	Arsenic, dissolved	1.5	1.4	6.9
A-2	Beryllium, dissolved	0.030 U	0.030 U	NC
A-2	Cadmium, dissolved	0.030 U	0.030 U	NC
A-2	Chromium, dissolved	0.05 J	0.20 U	NC
A-2	Copper, dissolved	0.25	0.29	14.8
A-2	Lead, dissolved	0.014 J	0.014 J	0
A-2	Mercury, dissolved	0.20 U	0.20 U	NC
A-2	Nickel, dissolved	2.06	2.03	1.5
A-2	Selenium, dissolved	0.3 J	1.5 U	NC
A-2	Silver, dissolved	0.030 U	0.030 U	NC
A-2	Thallium, dissolved	0.030 U	0.030 U	NC
A-2	Zinc, dissolved	4.26	4.44	4.1
A-2	Aluminum, total	41.7	42.0	0.7
A-2	Antimony, total	0.03 J	0.05 U	NC
A-2	Arsenic, total	1.6	1.6	0
A-2	Beryllium, total	0.030 U	0.030 U	NC
A-2	Cadmium, total	0.030 U	0.030 U	NC
A-2	Chromium, total	0.20 U	0.20 U	NC
A-2	Copper, total	0.87 J	0.82 J	5.9
A-2	Lead, total	0.083	0.084	1.2
A-2	Mercury, total	0.20 U	0.20 U	NC
A-2	Nickel, total	2.49 J	2.53 J	1.6
A-2	Selenium, total	0.5 J	0.3 J	50.0
A-2	Silver, total	0.030 U	0.030 U	NC
A-2	Thallium, total	0.030 U	0.030 U	NC
A-2	Zinc, total	4.59	4.37	4.9
Landfill Sites – Surface Water:				
RLSW03	Alkalinity	2,600 U	2,000 U	NC
RLSW03	Ammonia as Nitrogen	50 U	50 U	NC

Table G-1. Relative Percent Differences between Parent Sample/Field Duplicate Pairs for the 2013 Monitoring (Water Samples) (continued)

Parent Sample/ Field Duplicate Location	Analyte	Parent Sample Concentration (µg/L)	Field Duplicate Concentration (µg/L)	RPD (%)
RLSW03	Chemical Oxygen Demand	5,000 U	5,000 U	NC
RLSW03	Sulfate	58,000	58,200	0.3
RLSW03	Total Kjeldahl Nitrogen	290 J	300 J	3.4
RLSW03	Total dissolved solids	152,000	115,000	27.7

Notes:
D = The reported result is from a diluted analysis.
DRO = diesel-range organics
GRO = gasoline-range organics
J = estimated
µg/L = micrograms per liter (parts per billion)
NC = Not calculated; one or more of the sample pair results are "U" qualified.
RPD = relative percent difference
U = Analyte not detected at specified quantitation limit.
UJ = Analyte not detected at specified, estimated quantitation limit.
X = The reported result may have a slight high bias due to the presence of non-target components.
Y = The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.

Table G-2. Relative Percent Differences between Parent Sample/Field Duplicate Pairs for the 2013 Monitoring (Sediment Samples)

Parent Sample/ Field Duplicate Location	Analyte	Parent Sample Concentration (µg/kg)	Field Duplicate Concentration (µg/kg)	RPD (%)
Groundwater Sites – Sediment				
852	DRO	2,000,000 Y	1,900,000 Y	5.1
NL-04	Benzene	540 U	560 U	NC
NL-04	Toluene	540 U	560 U	NC
NL-04	Ethylbenzene	540 U	560 U	NC
NL-04	m,p-Xylenes	540 U	560 U	NC
NL-04	o-Xylene	540 U	560 U	NC
NL-04	GRO	52,000 U	16,000 U	NC
NL-08	2-Methylnaphthalene	3.2 U	3.3 U	NC
NL-08	Phenanthrene	2.7 J	1.5 J	**57.1**
Landfill Sites – Sediment				
102	bis(2-ethylhexyl)Phthalate	170 JD	1,200 U	NC
102	2-Methylnaphthalene	4.3 J	11	**87.6**
102	Acenaphthene	3.1 J	87	**186**
102	Acenaphthylene	3.3 J	14	**124**
102	Anthracene	13	83	**146**
102	Benzo(a)anthracene	120	400	**108**
102	Benzo(a)pyrene	180	220	20.0
102	Benzo(b)fluoranthene	230	400	**54.0**
102	Benzo(g,h,i)perylene	130	130	0
102	Benzo(k)fluoranthene	78	140	**56.9**
102	Chrysene	150 X	570 X	**117**
102	Dibenzo(a,h)anthracene	29	36	21.5
102	Fluoranthene	140	3,500 D	**185**
102	Fluorene	5.3 J	92	**178**
102	Indeno(1,2,3-cd)pyrene	140	140	0
102	Naphthalene	4.3 J	10	**79.7**
102	Phenanthrene	43	450	**165**
102	Pyrene	170	2,000 D	**169**
102	Aroclor 1016	13 U	12 U	NC
102	Aroclor 1221	26 U	23 U	NC
102	Aroclor 1232	13 U	12 U	NC
102	Aroclor 1242	13 U	12 U	NC
102	Aroclor 1248	13 U	12 U	NC
102	Aroclor 1254	38	56	38.3
102	Aroclor 1260	44	61	32.4
102	Antimony	3,330 J	3,030 J	9.4
102	Arsenic	15,600	10,400	40.0
102	Nickel	55,800	29,400	**62.0**

Bolded values represent RPD values greater than 50% criterion.

Notes:

D = The reported result is from a diluted analysis.
DRO = diesel-range organics
GRO = gasoline-range organics
J = estimated
µg/kg = micrograms per kilogram (parts per billion)
NC = Not calculated; one or more of the sample pair results are "U" qualified.
RPD = relative percent difference
U = Analyte not detected at specified quantitation limit.
X = The reported result may have a slight high bias due to the presence of non-target components.
Y = The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.

Table G-3. Completeness Percentages for 2013 Monitoring at Groundwater Sites

Completeness Parameter	GRO AK101.0	Benzene 8260C	BTEX 8260C	DRO AK102.0	PCE and Daughter Products 8260C	PAHs (17) 8270D SIM	Dibenz(a,h) anthracene 8270D SIM	2-Methyl-naphthalene and Phenanthrene 8270D SIM	Total and Dissolved Lead 6020A	NAPs SM2320B, RSK-175, 300.0
Area 303										
Environmental samples scheduled	16	4	8	3		2	6		8	16
Environmental samples collected	14	4	7	3		2	5		6	14
Environmental samples rejected	0	0	0	0		0	0		0	0
Environmental samples collected and not rejected	14	4	7	3		2	5		6	14
Percent of Environmental samples complete	88%	100%	88%	100%		100%	83%		75%	88%
Former Power Plant, Building T-1451										
Environmental samples scheduled			4	13		4		1		12
Environmental samples collected			4	11		4		1		10
Environmental samples rejected			0	0		0		0		0
Environmental samples collected and not rejected			4	11		4		1		10
Percent of Environmental samples complete			100%	85%		100%		100%		83%
GCI Compound, UST GCI-1										
Environmental samples scheduled	6									
Environmental samples collected	6									
Environmental samples rejected	0									
Environmental samples collected and not rejected	6									
Percent of Environmental samples complete	100%									
Arctic Acre Housing Area										
Environmental samples scheduled				4						
Environmental samples collected				4						
Environmental samples rejected				0						
Environmental samples collected and not rejected				4						
Percent of Environmental samples complete				100%						
NMCB Building T-1416 Expanded Area										
Environmental samples scheduled	10									
Environmental samples collected	7									
Environmental samples rejected	0									
Environmental samples collected and not rejected	7									
Percent of Environmental samples complete	70%									

Table G-3. Completeness Percentages for 2013 Monitoring at Groundwater Sites (continued)

Completeness Parameter	GRO AK101.0	Benzene 8260C	BTEX 8260C	DRO AK102.0	PCE and Daughter Products 8260C	PAHs (17) 8270D SIM	Dibenz(a,h) anthracene 8270D SIM	2-Methyl-naphthalene and Phenanthrene 8270D SIM	Total and Dissolved Lead 6020A	NAPs SM2320B, RSK-175, 300.0
ROICC Contractor's Area, UST ROICC-7										
Environmental samples scheduled		2								
Environmental samples collected		2								
Environmental samples rejected		0								
Environmental samples collected and not rejected		2								
Percent of Environmental samples complete		100%								
Runway 5-23 Avgas Valve Pit										
Environmental samples scheduled	1									
Environmental samples collected	1									
Environmental samples rejected	0									
Environmental samples collected and not rejected	1									
Percent of Environmental samples complete	100%									
SA 79, Main Road Pipeline, South End										
Environmental samples scheduled				3						
Environmental samples collected				3						
Environmental samples rejected				0						
Environmental samples collected and not rejected				3						
Percent of Environmental samples complete				100%						
SA 80, Steam Plant 4, USTs 27089 and 27090										
Environmental samples scheduled				4						
Environmental samples collected				4						
Environmental samples rejected				0						
Environmental samples collected and not rejected				4						
Percent of Environmental samples complete				100%						
South of Runway 18-36 Area										
Environmental samples scheduled			5	6		5		3		
Environmental samples collected			5	6		5		3		
Environmental samples rejected			0	0		0		0		
Environmental samples collected and not rejected			5	6		5		3		
Percent of Environmental samples complete			100%	100%		100%		100%		

Table G-3. Completeness Percentages for 2013 Monitoring at Groundwater Sites (continued)

Completeness Parameter	GRO AK101.0	Benzene 8260C	BTEX 8260C	DRO AK102.0	PCE and Daughter Products 8260C	PAHs (17) 8270D SIM	Dibenz(a,h) anthracene 8270D SIM	2-Methyl-naphthalene and Phenanthrene 8270D SIM	Total and Dissolved Lead 6020A	NAPs SM2320B, RSK-175, 300.0
SWMU 14, Old Pesticide Disposal Area										
Environmental samples scheduled	1			1	1				1	
Environmental samples collected	1			1	1				1	
Environmental samples rejected	0			0	0				0	
Environmental samples collected and not rejected	1			1	1				1	
Percent of Environmental samples complete	100%			100%	100%				100%	
SWMU 17, Power Plant 3										
Environmental samples scheduled					1					
Environmental samples collected					1					
Environmental samples rejected					0					
Environmental samples collected and not rejected					1					
Percent of Environmental samples complete					100%					
SWMU 55, Public Works Transportation Department Waste Storage Area										
Environmental samples scheduled					1					
Environmental samples collected					1					
Environmental samples rejected					0					
Environmental samples collected and not rejected					1					
Percent of Environmental samples complete					100%					
SWMU 60, Tank Farm A										
Environmental samples scheduled		1	6	6		6		1		
Environmental samples collected		1	4	4		4		1		
Environmental samples rejected		0	0	0		0		0		
Environmental samples collected and not rejected		1	4	4		4		1		
Percent of Environmental samples complete		100%	67%	67%		67%		100%		
SWMU 61, Tank Farm B										
Environmental samples scheduled	5		5			2				
Environmental samples collected	5		5			2				
Environmental samples rejected	0		0			0				
Environmental samples collected and not rejected	5		5			2				
Percent of Environmental samples complete	100%		100%			100%				

Table G-3. Completeness Percentages for 2013 Monitoring at Groundwater Sites (continued)

Completeness Parameter	GRO AK101.0	Benzene 8260C	BTEX 8260C	DRO AK102.0	PCE and Daughter Products 8260C	PAHs (17) 8270D SIM	Dibenz(a,h) anthracene 8270D SIM	2-Methyl-naphthalene and Phenanthrene 8270D SIM	Total and Dissolved Lead 6020A	NAPs SM2320B, RSK-175, 300.0
SWMU 62, New Housing Fuel Leak										
Environmental samples scheduled	5		4	16		1		1	1	1
Environmental samples collected	4		3	15		1		0	1	1
Environmental samples rejected	0		0	0		0		0	0	0
Environmental samples collected and not rejected	4		3	15		1		0	1	1
Percent of Environmental samples complete	80%		75%	94%		100%		0%	100%	100%
Tanker Shed UST 42494										
Environmental samples scheduled				4						
Environmental samples collected				4						
Environmental samples rejected				0						
Environmental samples collected and not rejected				4						
Percent of Environmental samples complete				100%						
Total – All Sites										
Environmental samples scheduled	44	7	32	60	3	20	6	6	10	29
Environmental samples collected	38	7	28	55	3	18	5	5	8	25
Environmental samples rejected	0	0	0	0	0	0	0	0	0	0
Environmental samples collected and not rejected	38	7	28	55	3	18	5	5	8	25
Percent of Environmental samples complete	86%	100%	88%	92%	100%	90%	83%	83%	80%	86%

Notes:
AST = aboveground storage tank
BTEX = benzene, toluene, ethyl benzene, xylene
DRMO = Defense Reutilization Marketing Office
DRO = diesel-range organics
GCI = General Communications, Inc.
GRO = gasoline-range organics
NAPS = natural attenuation parameters, consisting of laboratory analyses for alkalinity, methane, and sulfate and field test kit analyses for carbon dioxide, dissolved oxygen, and ferrous iron
NMCB = Naval Mobile Construction Battalion
PAHs = polycyclic aromatic hydrocarbons
PCE = perchloroethylene
ROICC = Resident Officer in Charge of Construction
SA = source area
SIM = selected ion monitoring
SWMU = solid waste management unit
VOCs = volatile organic compounds
UST = underground storage tank

Table G-4. Completeness Percentages for 2013 at Landfill Sites

Completeness Parameter	Total and Dissolved Aluminum 6020A	Total and Dissolved PP Metals 6020A and 7470A	VOCs 8260C	Water Quality Parameters	PCB Aroclors 8082A Low Level	Antimony, Arsenic, and Nickel 6020A	PAHs (17) and bis(2-ethylhexyl) Phthalate 8270D SIM and 8270D Low Level
SWMU 11, Palisades Landfill							
Environmental samples scheduled					3	3	3
Environmental samples collected					3	3	3
Environmental samples rejected					0	0	0
Environmental samples collected and not rejected					3	3	3
Percent of Environmental samples complete					100%	100%	100%
SWMU 25, Roberts Landfill							
Environmental samples scheduled	12	12	9	12			
Environmental samples collected	10	10	7	10			
Environmental samples rejected	0	0	0	0			
Environmental samples collected and not rejected	10	10	7	10			
Percent of Environmental samples complete	83%	83%	78%	83%			
Total – All Sites							
Environmental samples scheduled	12	12	9		3	3	3
Environmental samples collected	10	10	7		3	3	3
Environmental samples rejected	0	0	0		0	0	0
Environmental samples collected and not rejected	10	10	7		3	3	3
Percent of Environmental samples complete	83%	83%	78%		100%	100%	100%

Notes:
PAHs = polycyclic aromatic hydrocarbons
PCB = polychlorinated biphenyls
PP = priority pollutant
SIM = selected ion monitoring
SWMU = solid waste management unit
VOCs = volatile organic compounds

APPENDIX H

STATISTICAL CALCULATIONS

Mann-Kendall Statistical Test

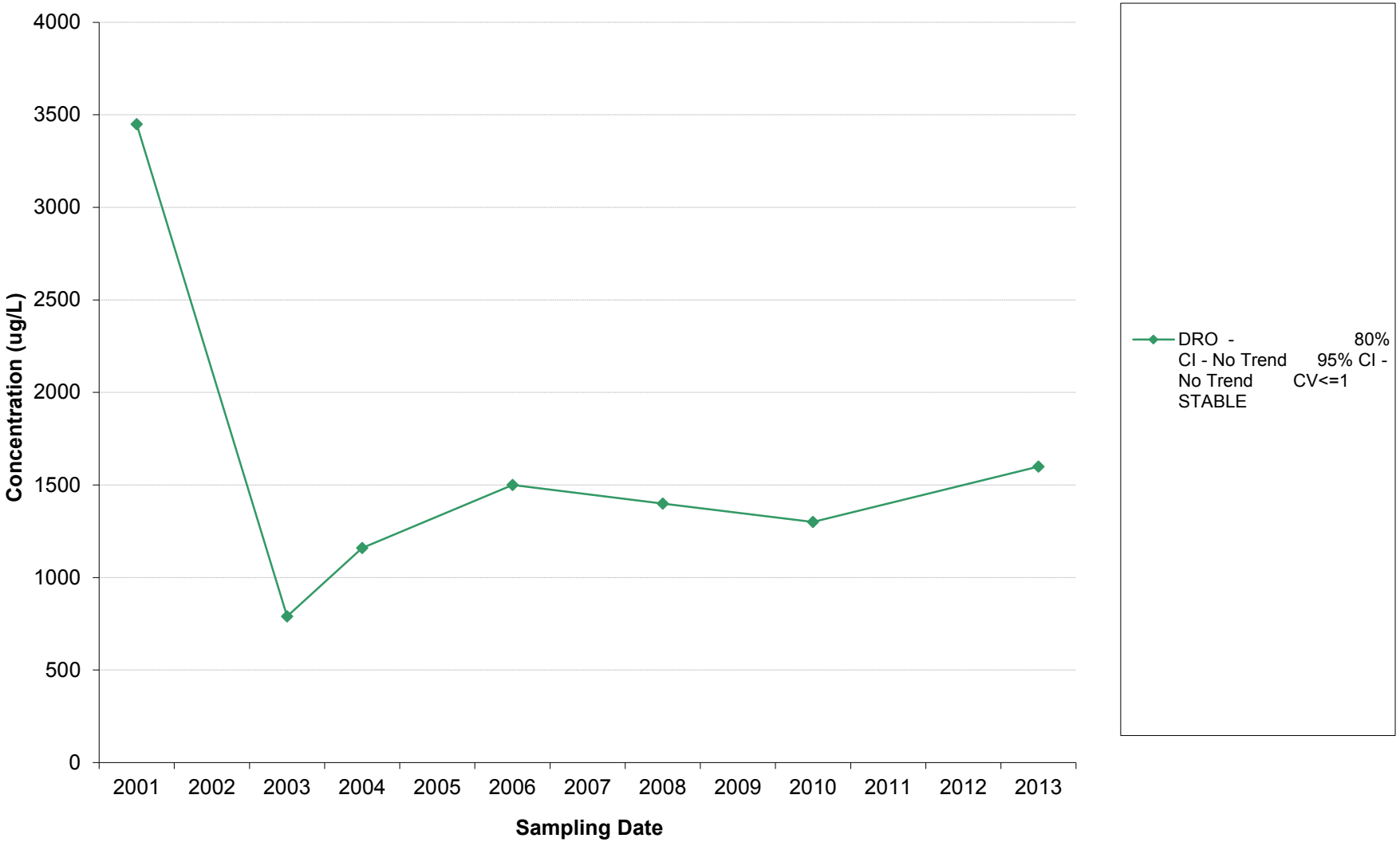
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	Arctic Acres	Well Number =	03-416

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/01	**3,450**					
2	10/01/03	**790**					
3	10/01/04	**1,160**					
4	10/01/06	**1,500**					
5	10/01/08	**1,400**					
6	10/01/10	**1,300**					
7	10/01/13	**1,600**					
8							
9							
10							

Mann Kendall Statistic (S) =	3	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	1600.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	857.535	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.536	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP

Housing Area, Arctic Acres, Well 03-416
Contaminant Concentration vs. Time



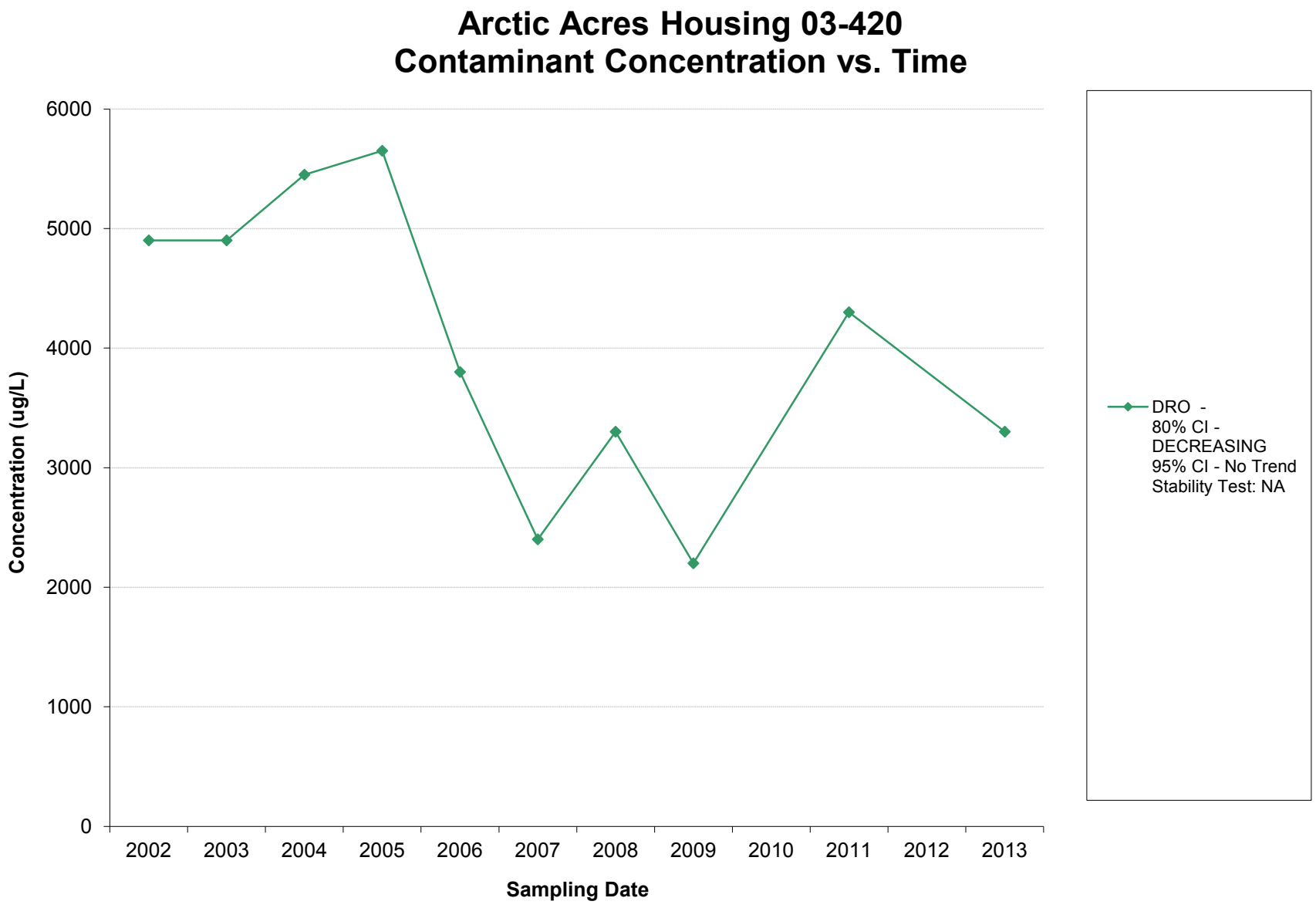
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	Arctic Acres	Well Number =	03-420

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/02	**4,900**					
2	10/01/03	**4,900**					
3	10/01/04	**5,450**					
4	10/01/05	**5,650**					
5	10/01/06	**3,800**					
6	10/01/07	**2,400**					
7	10/01/08	**3,300**					
8	10/01/09	**2,200**					
9	10/01/11	**4,300**					
10	10/01/13	**3,300**					

Mann Kendall Statistic (S) =	-19	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	4020.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1217.967	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.303	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at		n<4	n<4	n<4	n<4	n<4
80% Confidence Level	**NA**	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


Arctic Acres Housing 03-420
Contaminant Concentration vs. Time
Concentration (ug/L)
6000
5000
4000
3000
2000
1000
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI -
DECREASING
95% CI - No Trend
Stability Test: NA

Mann-Kendall Statistical Test

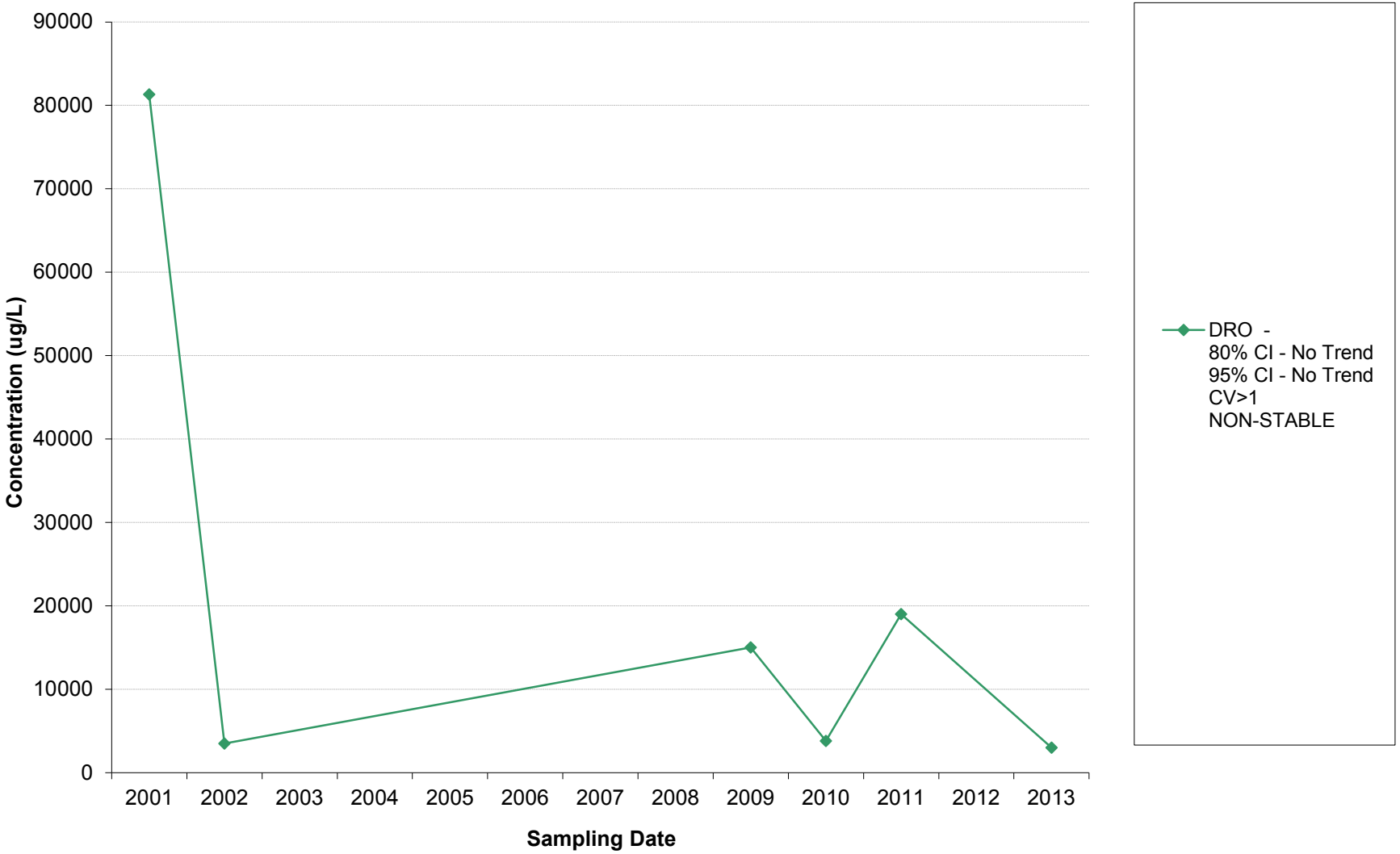
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	Arctic Acres	Well Number =	03-421

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/01	**81,300**					
2	10/01/02	**3,500**					
3	10/01/09	**15,000**					
4	10/01/10	**3,800**					
5	10/01/11	**19,000**					
6	10/01/13	**3,000**					
7							
8							
9							
10							

Mann Kendall Statistic (S) =	-5	0	0	0	0	0
Number of Rounds (n) =	6	0	0	0	0	0
Average =	20933.33	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	30338.600	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	1.449	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	No Trend	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	No Trend	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	CV>1 NON-STABLE	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP

Arctic Acres Housing 03-421
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

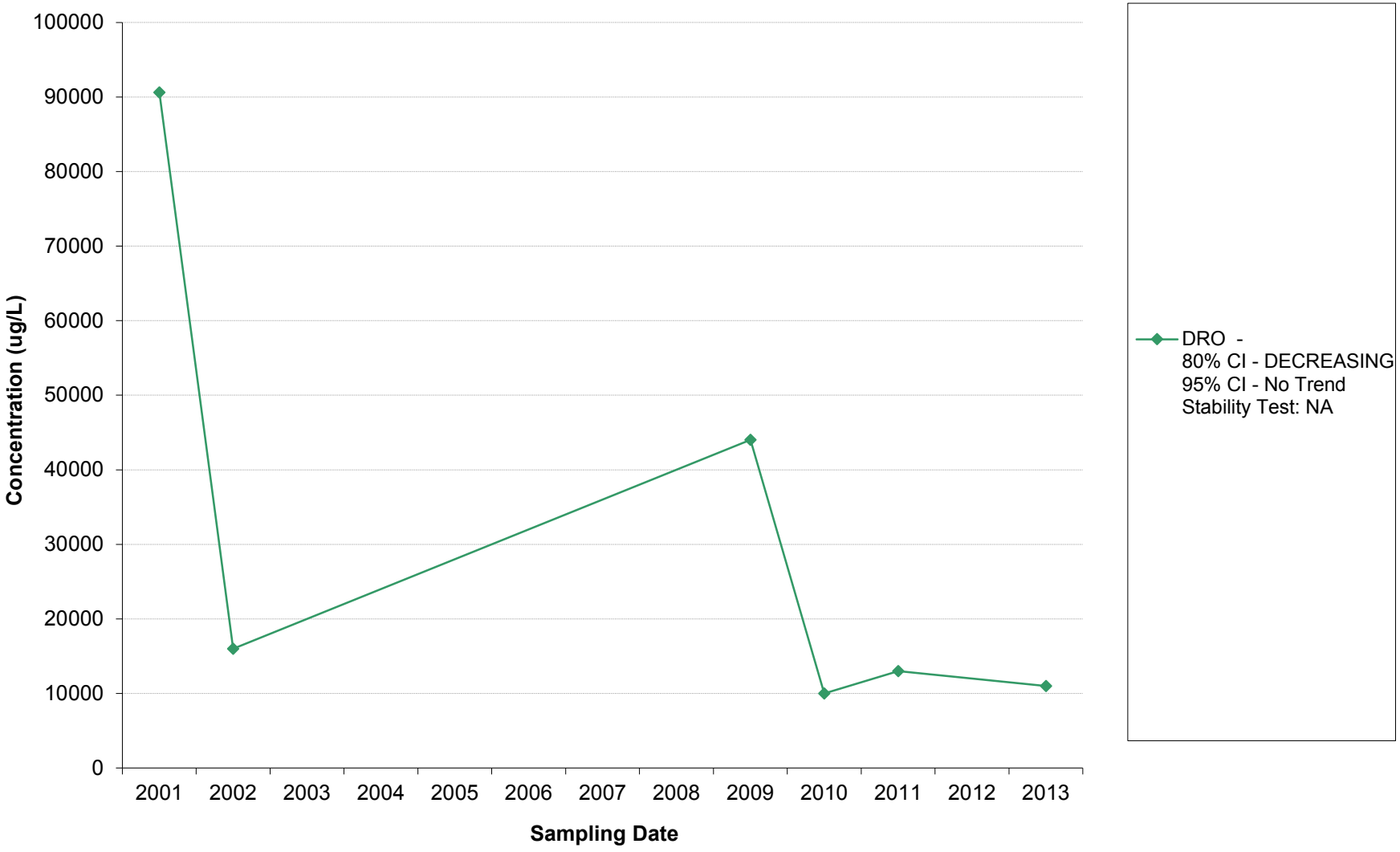
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	Arctic Acres	Well Number =	03-890

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/01	**90,600**					
2	10/01/02	**16,000**					
3	10/01/09	**44,000**					
4	10/01/10	**10,000**					
5	10/01/11	**13,000**					
6	10/01/13	**11,000**					
7							
8							
9							
10							

Mann Kendall Statistic (S) =	-9	0	0	0	0	0
Number of Rounds (n) =	6	0	0	0	0	0
Average =	30766.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	31971.341	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	1.039	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at		n<4	n<4	n<4	n<4	n<4
80% Confidence Level	**NA**	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP

Arctic Acres Housing 03-890
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

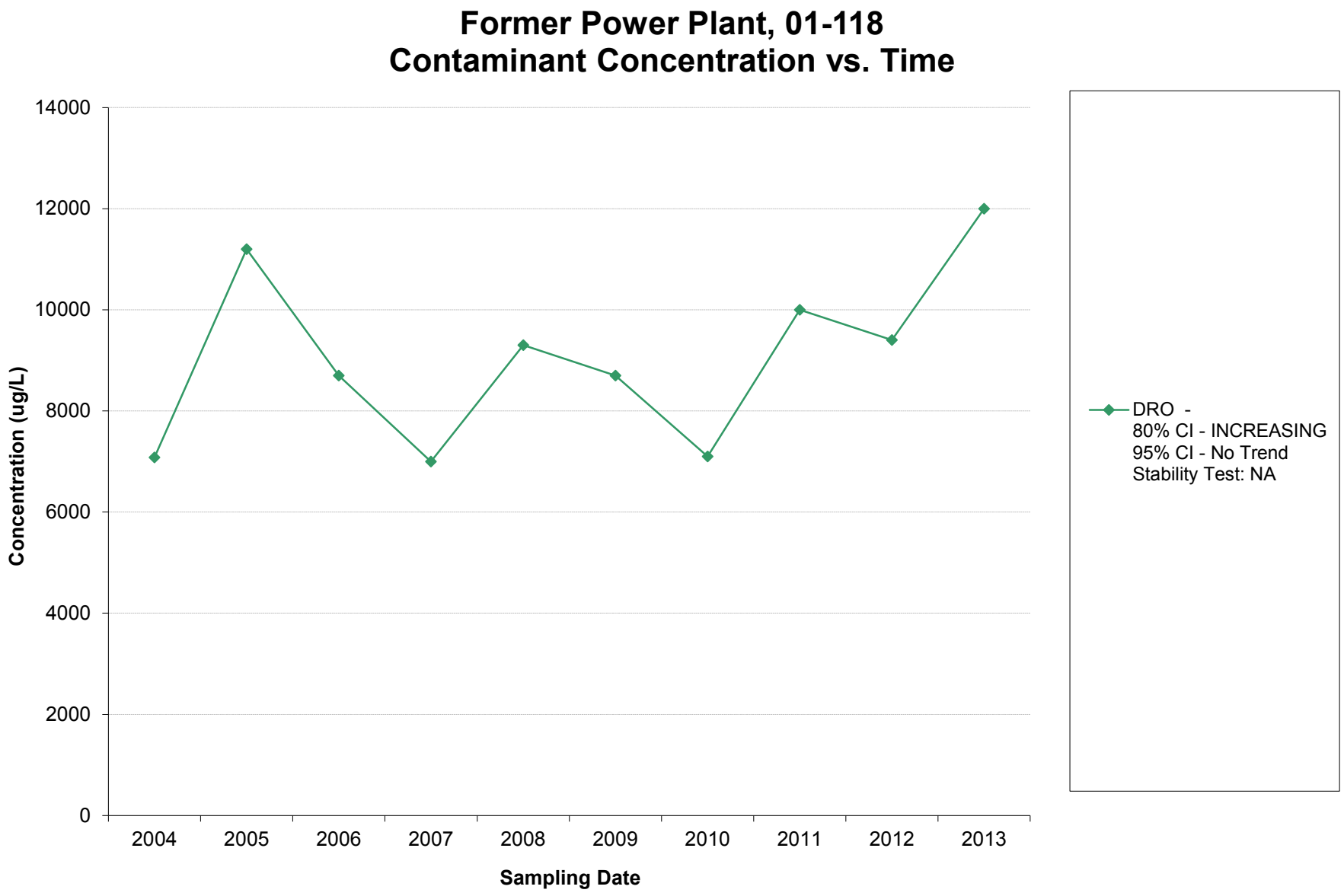
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	Fmr Pwr Plant	Well Number =	01-118

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**7,080**					
2	10/01/05	**11,200**					
3	10/01/06	**8,700**					
4	10/01/07	**7,000**					
5	10/01/08	**9,300**					
6	10/01/09	**8,700**					
7	10/01/10	**7,100**					
8	10/01/11	**10,000**					
9	09/01/12	**9,400**					
10	09/01/13	**12,000**					

Mann Kendall Statistic (S) =	16	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	9048.00					
Standard Deviation =	1717.342					
Coefficient of Variation(CV)=	0.190					

Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	INCREASING	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	No Trend	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at		n<4	n<4	n<4	n<4	n<4
80% Confidence Level	NA	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


Former Power Plant, 01-118
Contaminant Concentration vs. Time
Concentration (ug/L)
14000
12000
10000
8000
6000
4000
2000
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - INCREASING
95% CI - No Trend
Stability Test: NA

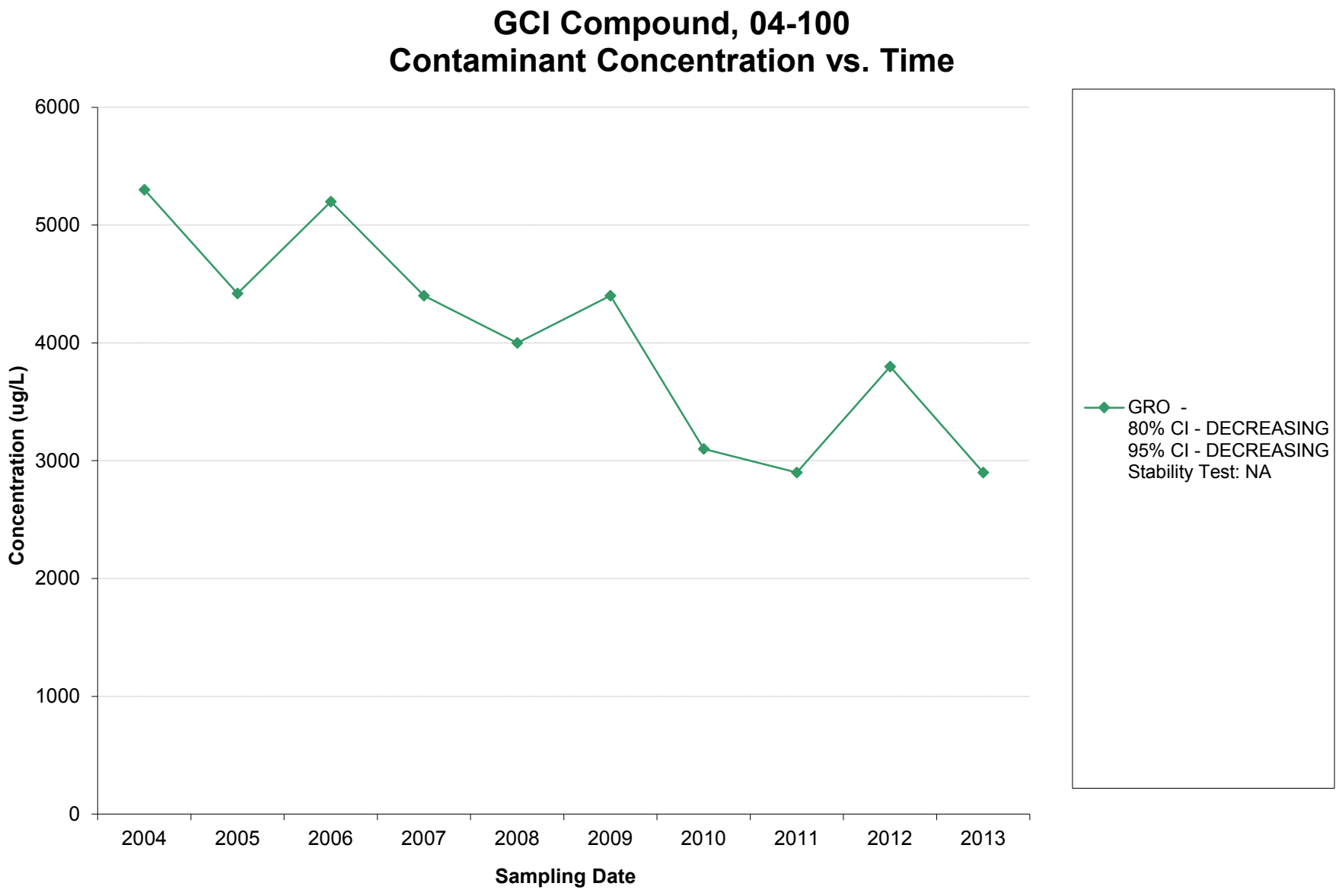
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	GCI Compound	Well Number =	04-100

	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**5,300**					
2	10/01/05	**4,420**					
3	10/01/06	**5,200**					
4	10/01/07	**4,400**					
5	10/01/08	**4,000**					
6	10/01/09	**4,400**					
7	10/01/10	**3,100**					
8	10/01/11	**2,900**					
9	10/01/12	**3,800**					
10	10/01/13	**2,900**					

Mann Kendall Statistic (S) =	-35	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	4042.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	874.246	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.216	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


GCI Compound, 04-100
Contaminant Concentration vs. Time
Concentration (ug/L)
6000
5000
4000
3000
2000
1000
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA

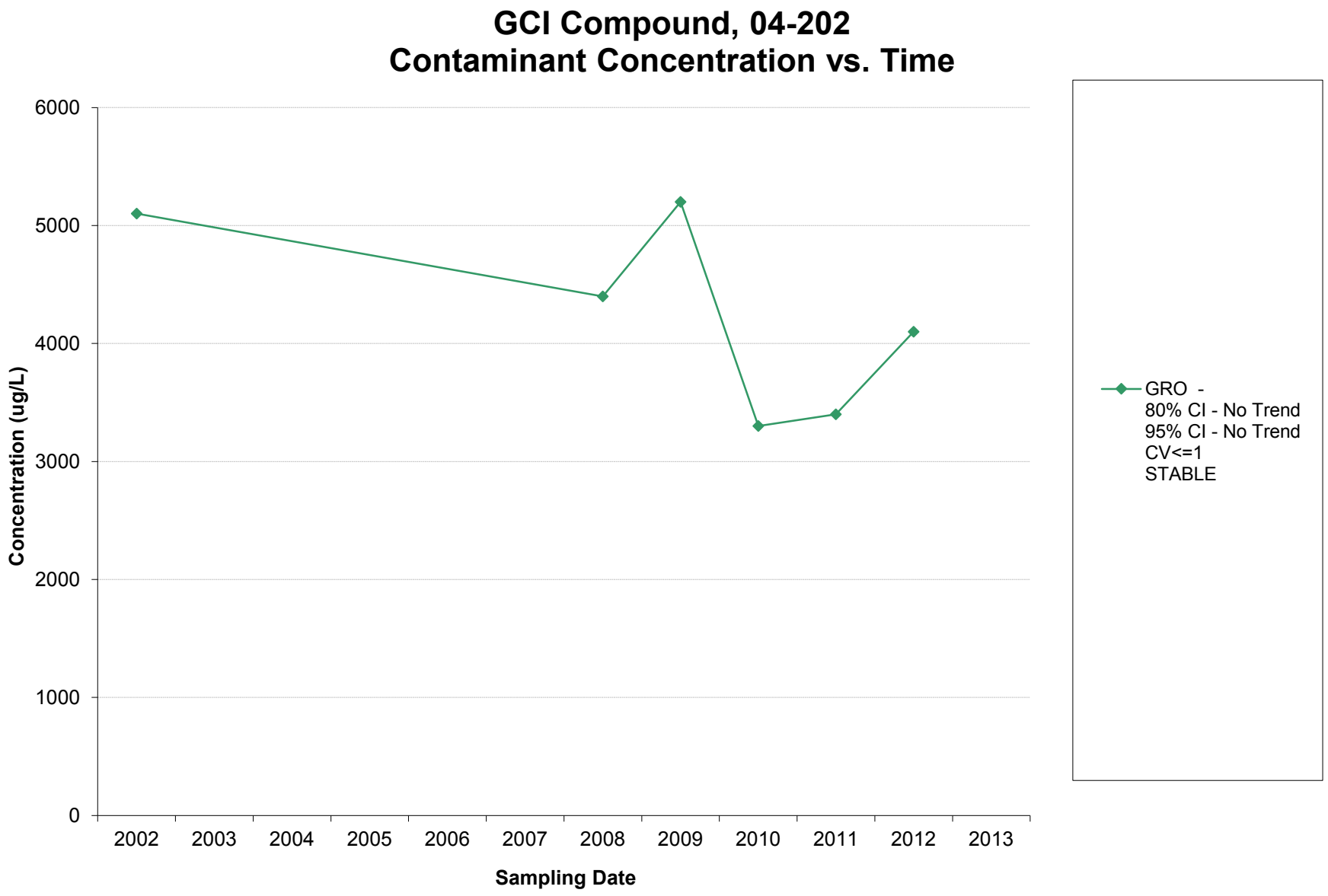
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	GCI Compound	Well Number =	04-202

	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/02	**5,100**					
2	10/01/08	**4,400**					
3	10/01/09	**5,200**					
4	10/01/10	**3,300**					
5	10/01/11	**3,400**					
6	10/01/12	**4,100**					
7							
8							
9							
10							

Mann Kendall Statistic (S) =	-5	0	0	0	0	0
Number of Rounds (n) =	6	0	0	0	0	0
Average =	4250.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	811.788	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.191	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


GCI Compound, 04-202
Contaminant Concentration vs. Time
Concentration (ug/L)
6000
5000
4000
3000
2000
1000
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

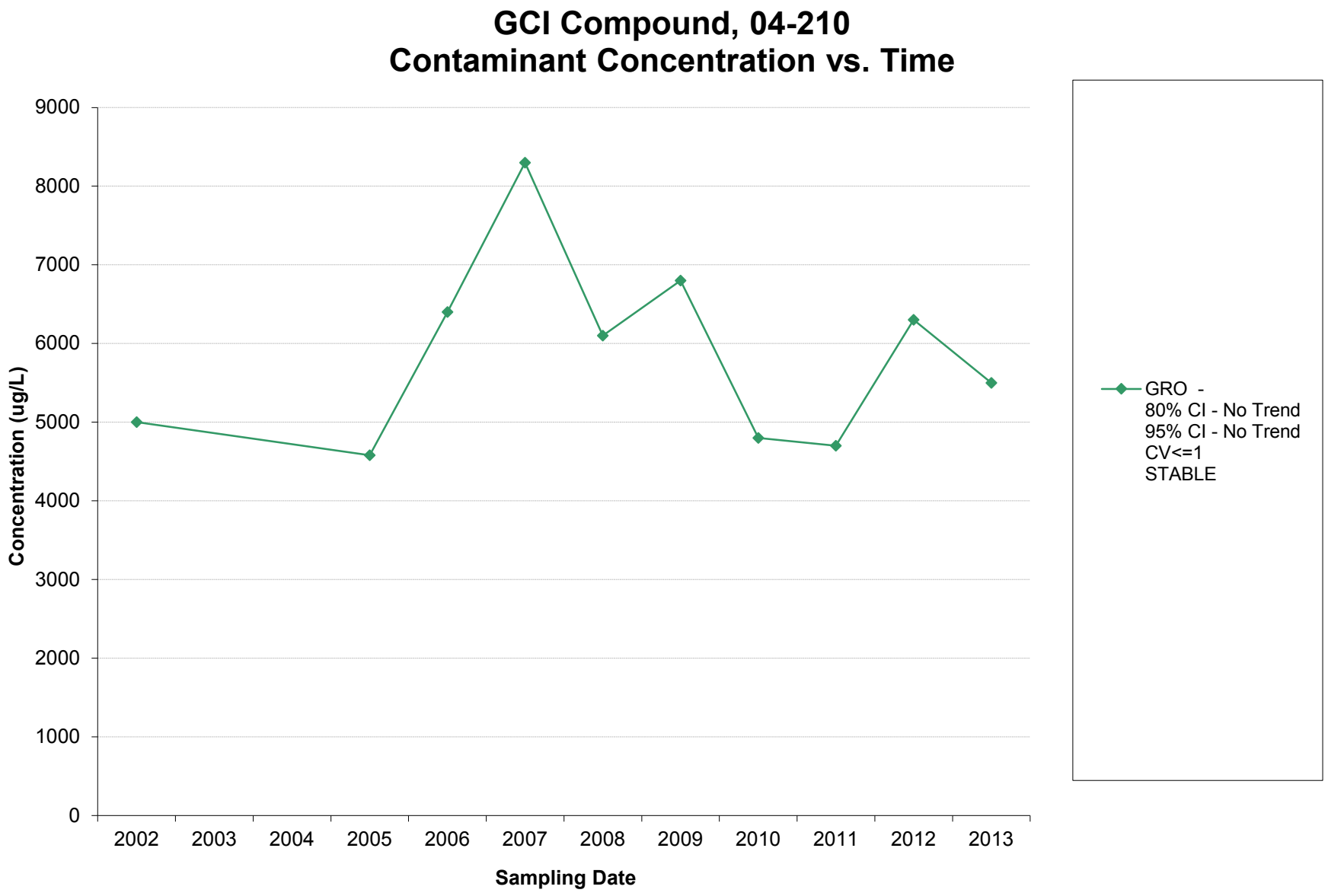
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	GCI Compound	Well Number =	04-210

	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/02	**5,000**					
2	10/01/05	**4,580**					
3	10/01/06	**6,400**					
4	10/01/07	**8,300**					
5	10/01/08	**6,100**					
6	10/01/09	**6,800**					
7	10/01/10	**4,800**					
8	10/01/11	**4,700**					
9	09/01/12	**6,300**					
10	09/01/13	**5,500**					

Mann Kendall Statistic (S) =	-1	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	5848.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1171.673	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.200	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at	**CV<=1**	**n<4**	**n<4**	**n<4**	**n<4**	**n<4**
80% Confidence Level	**STABLE**	**n<4**	**n<4**	**n<4**	**n<4**	**n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


GCI Compound, 04-210
Contaminant Concentration vs. Time
Concentration (ug/L)
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

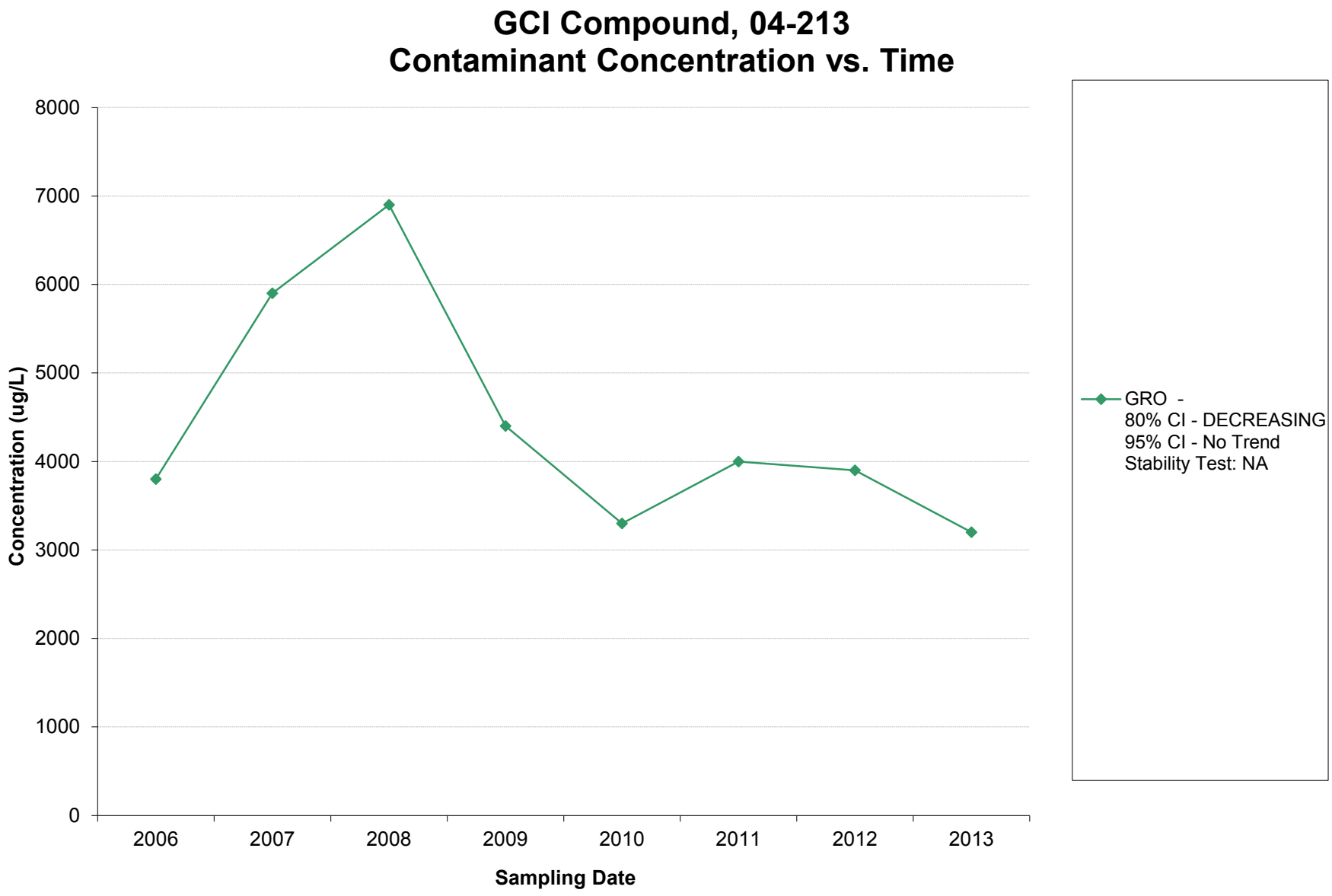
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	GCI Compound	Well Number =	04-213

	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**3,800**					
2	10/01/07	**5,900**					
3	10/01/08	**6,900**					
4	10/01/09	**4,400**					
5	10/01/10	**3,300**					
6	10/01/11	**4,000**					
7	10/01/12	**3,900**					
8	10/01/13	**3,200**					
9							
10							

Mann Kendall Statistic (S) =	-12	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	4425.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1304.662	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.295	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at		n<4	n<4	n<4	n<4	n<4
80% Confidence Level	**NA**	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


GCI Compound, 04-213
Contaminant Concentration vs. Time
Concentration (ug/L)
8000
7000
6000
5000
4000
3000
2000
1000
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - DECREASING
95% CI - No Trend
Stability Test: NA

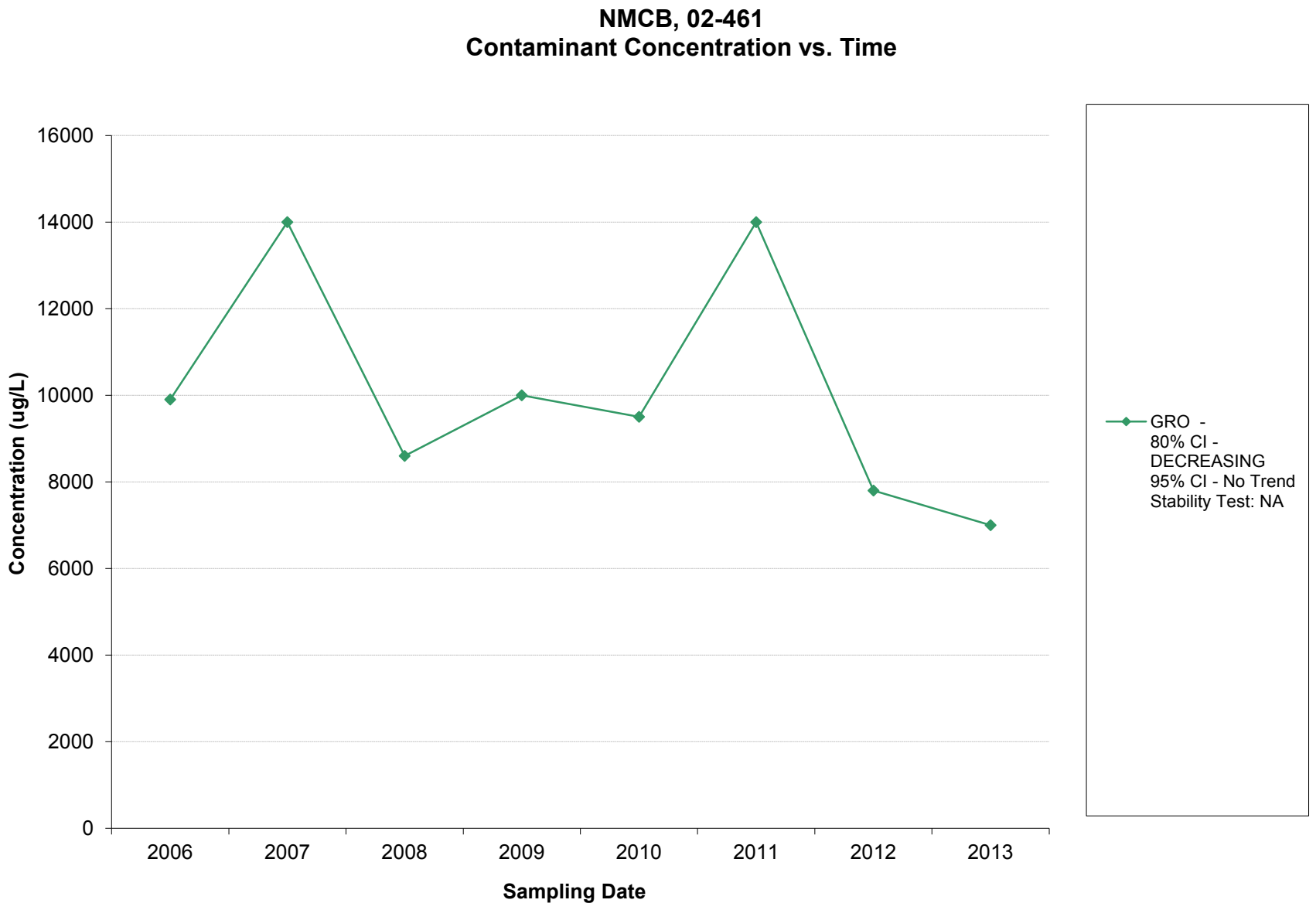
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. = NMCB	Well Number =	02-461

	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**9900**					
2	10/01/07	**14000**					
3	10/01/08	**8600**					
4	10/01/09	**10000**					
5	10/01/10	**9500**					
6	10/01/11	**14000**					
7	10/01/12	**7800**					
8	10/01/13	**7000**					
9							
10							

Mann Kendall Statistic (S) =	-11	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	10100.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2618.069	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.259	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at		n<4	n<4	n<4	n<4	n<4
80% Confidence Level	**NA**	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	1/7/2014	Checked By =	RB


NMCB, 02-461
Contaminant Concentration vs. Time
Concentration (ug/L)
16000
14000
12000
10000
8000
6000
4000
2000
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI -
DECREASING
95% CI - No Trend
Stability Test: NA

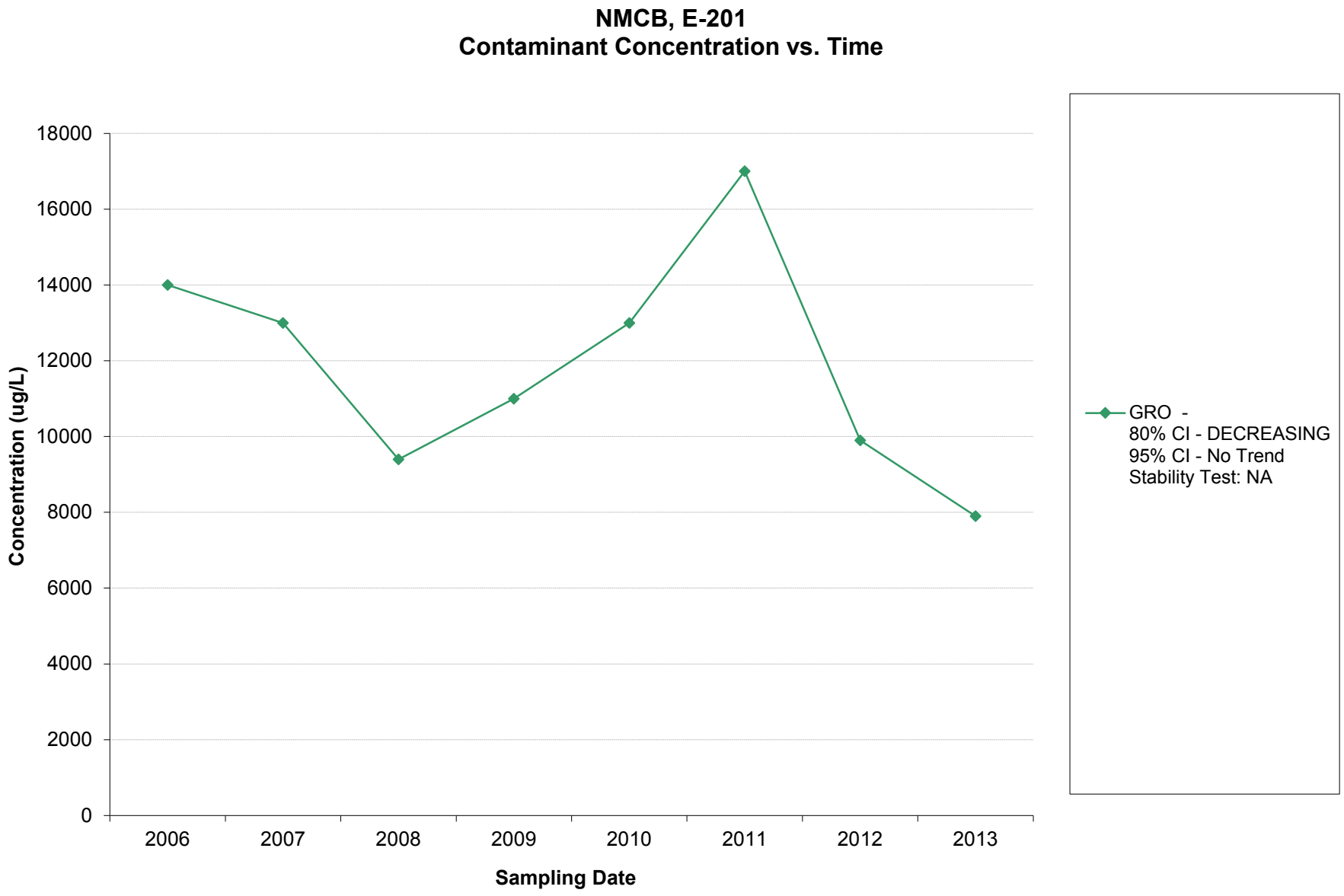
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. = NMCB	Well Number =	E-201

Event Number	Sampling Date (most recent last)	GRO Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
	Compound ->						
1	10/01/06	**14000**					
2	10/01/07	**13000**					
3	10/01/08	**9400**					
4	10/01/09	**11000**					
5	10/01/10	**13000**					
6	10/01/11	**17000**					
7	10/01/12	**9900**					
8	10/01/13	**7900**					
9							
10							

Mann Kendall Statistic (S) =	-9	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	11900.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2925.259	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.246	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at		n<4	n<4	n<4	n<4	n<4
80% Confidence Level	**NA**	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	1/7/2014	Checked By =	RB


NMCB, E-201
Contaminant Concentration vs. Time
Concentration (ug/L)
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - DECREASING
95% CI - No Trend
Stability Test: NA

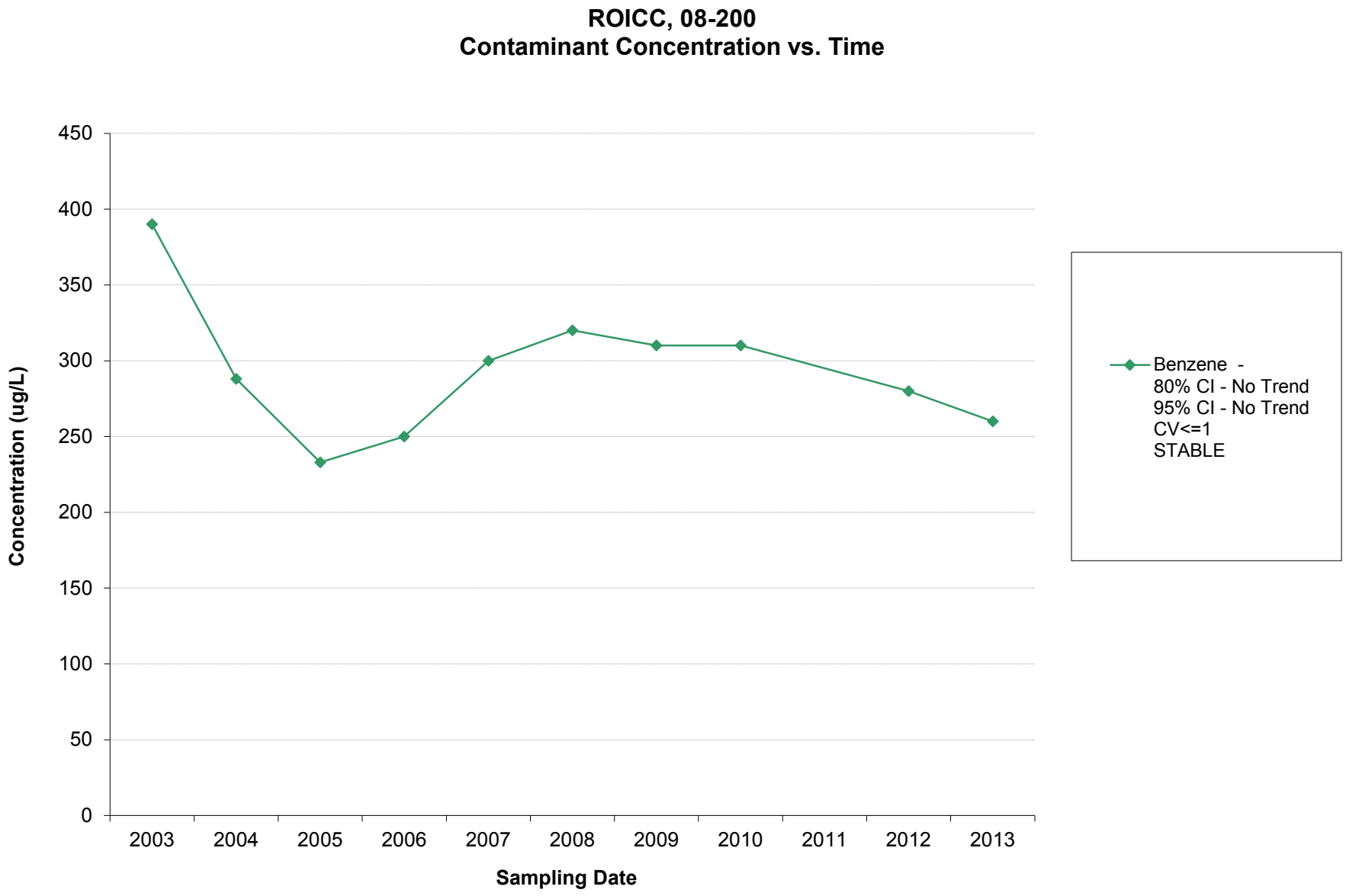
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	ROICC	Well Number =	08-200

	Compound ->	Benzene					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/03	**390**					
2	10/01/04	**288**					
3	10/01/05	**233**					
4	10/01/06	**250**					
5	10/01/07	**300**					
6	10/01/08	**320**					
7	10/01/09	**310**					
8	10/01/10	**310**					
9	10/01/12	**280**					
10	10/01/13	**260**					

Mann Kendall Statistic (S) =	-4	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	294.10	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	44.077	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.150	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at	**CV<=1**	**n<4**	**n<4**	**n<4**	**n<4**	**n<4**
80% Confidence Level	**STABLE**	**n<4**	**n<4**	**n<4**	**n<4**	**n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


ROICC, 08-200
Contaminant Concentration vs. Time
Concentration (ug/L)
450
400
350
300
250
200
150
100
50
0
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
Benzene -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

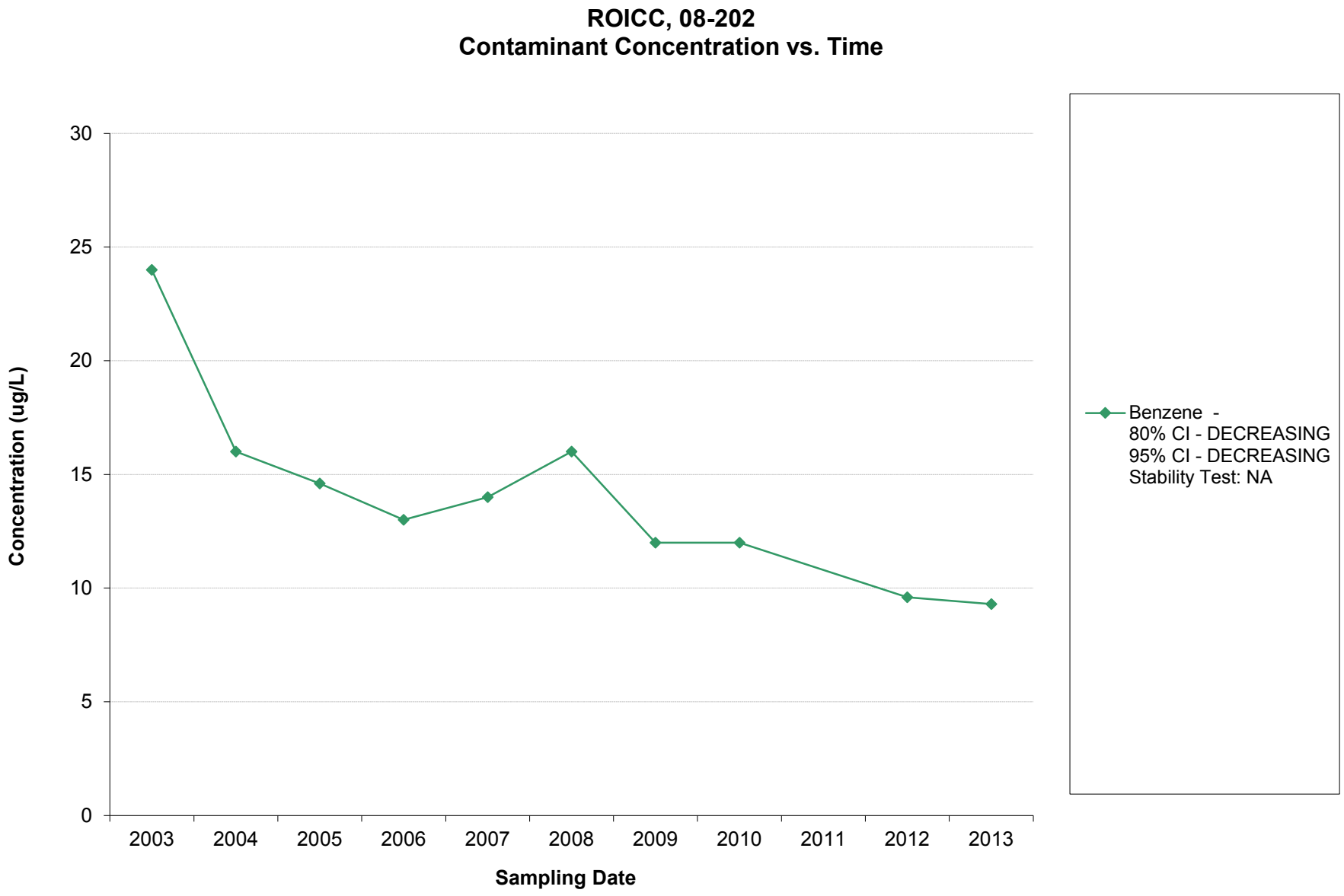
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	ROICC	Well Number =	08-202

	Compound ->	Benzene					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/03	**24**					
2	10/01/04	**16**					
3	10/01/05	**14.6**					
4	10/01/06	**13**					
5	10/01/07	**14**					
6	10/01/08	**16**					
7	10/01/09	**12**					
8	10/01/10	**12**					
9	10/01/12	**9.6**					
10	10/01/13	**9.3**					

Mann Kendall Statistic (S) =	-35	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	14.05	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	4.200	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.299	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**	**DECREASING**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**DECREASING**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


ROICC, 08-202
Contaminant Concentration vs. Time
Concentration (ug/L)
30
25
20
15
10
5
0
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
Benzene -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA

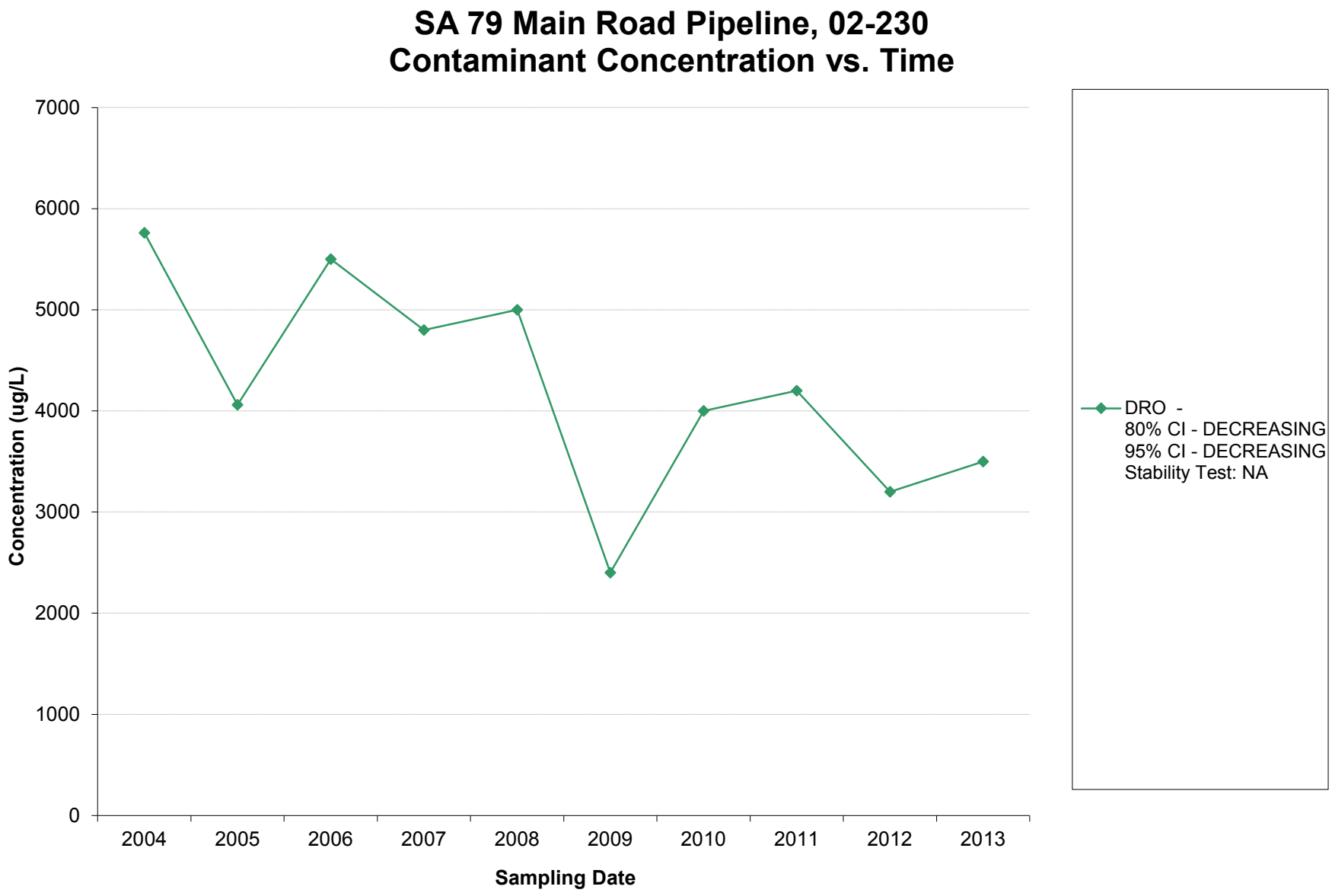
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SA 79	Well Number =	02-230

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**5,760**					
2	10/01/05	**4,060**					
3	10/01/06	**5,500**					
4	10/01/07	**4,800**					
5	10/01/08	**5,000**					
6	10/01/09	**2,400**					
7	10/01/10	**4,000**					
8	10/01/11	**4,200**					
9	10/01/12	**3,200**					
10	10/01/13	**3,500**					

Mann Kendall Statistic (S) =	-23	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	4242.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1048.574	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.247	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SA 79 Main Road Pipeline, 02-230
Contaminant Concentration vs. Time
Concentration (ug/L)
7000
6000
5000
4000
3000
2000
1000
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA

Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SA 79	Well Number =	MRP-MW8

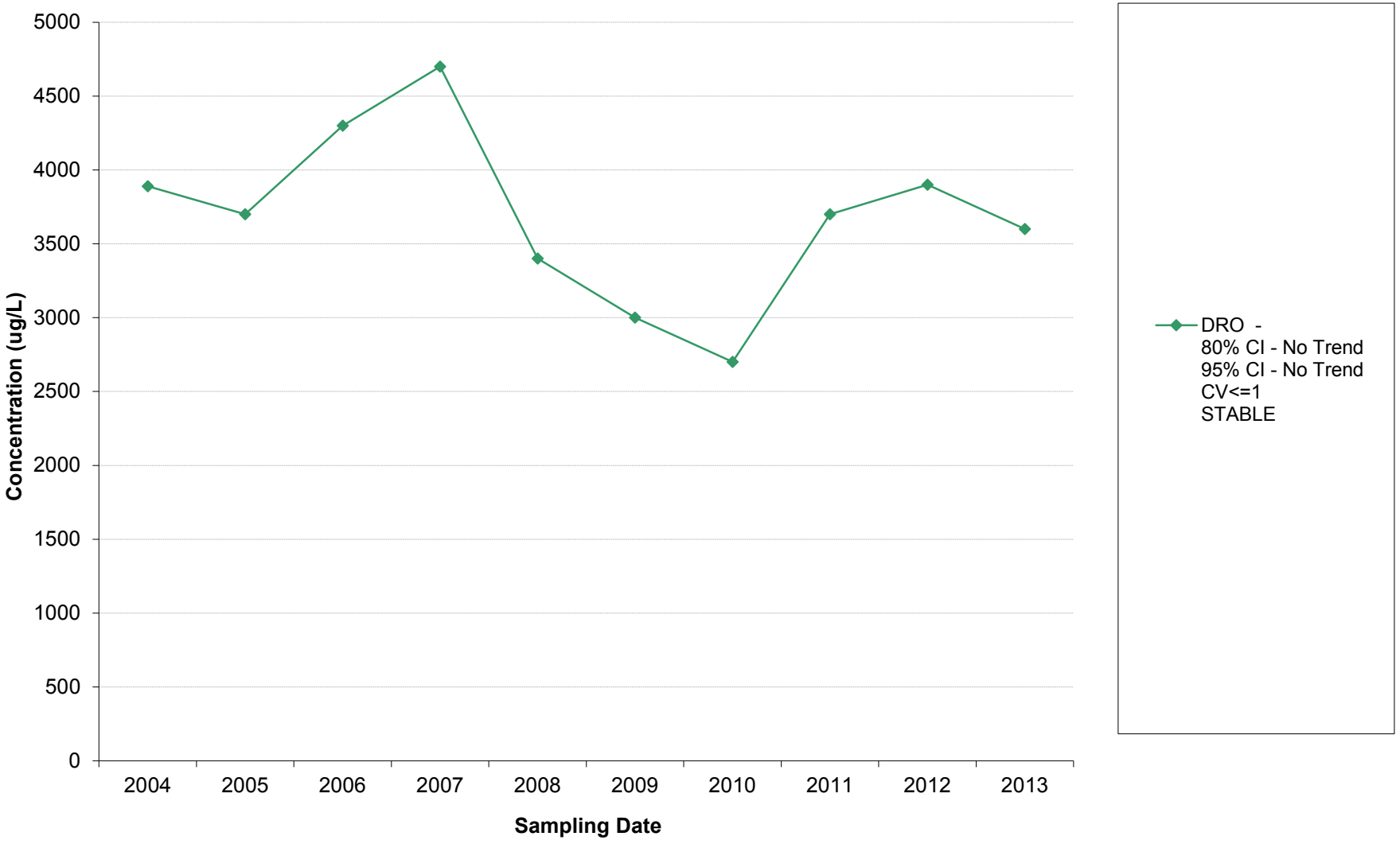
	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**3,890**					
2	10/01/05	**3,700**					
3	10/01/06	**4,300**					
4	10/01/07	**4,700**					
5	10/01/08	**3,400**					
6	10/01/09	**3,000**					
7	10/01/10	**2,700**					
8	10/01/11	**3,700**					
9	10/01/12	**3,900**					
10	10/01/13	**3,600**					

Mann Kendall Statistic (S) =	-10	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	3689.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	579.740	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.157	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP

SA 79 Main Road Pipeline, MRP-MW8
Contaminant Concentration vs. Time



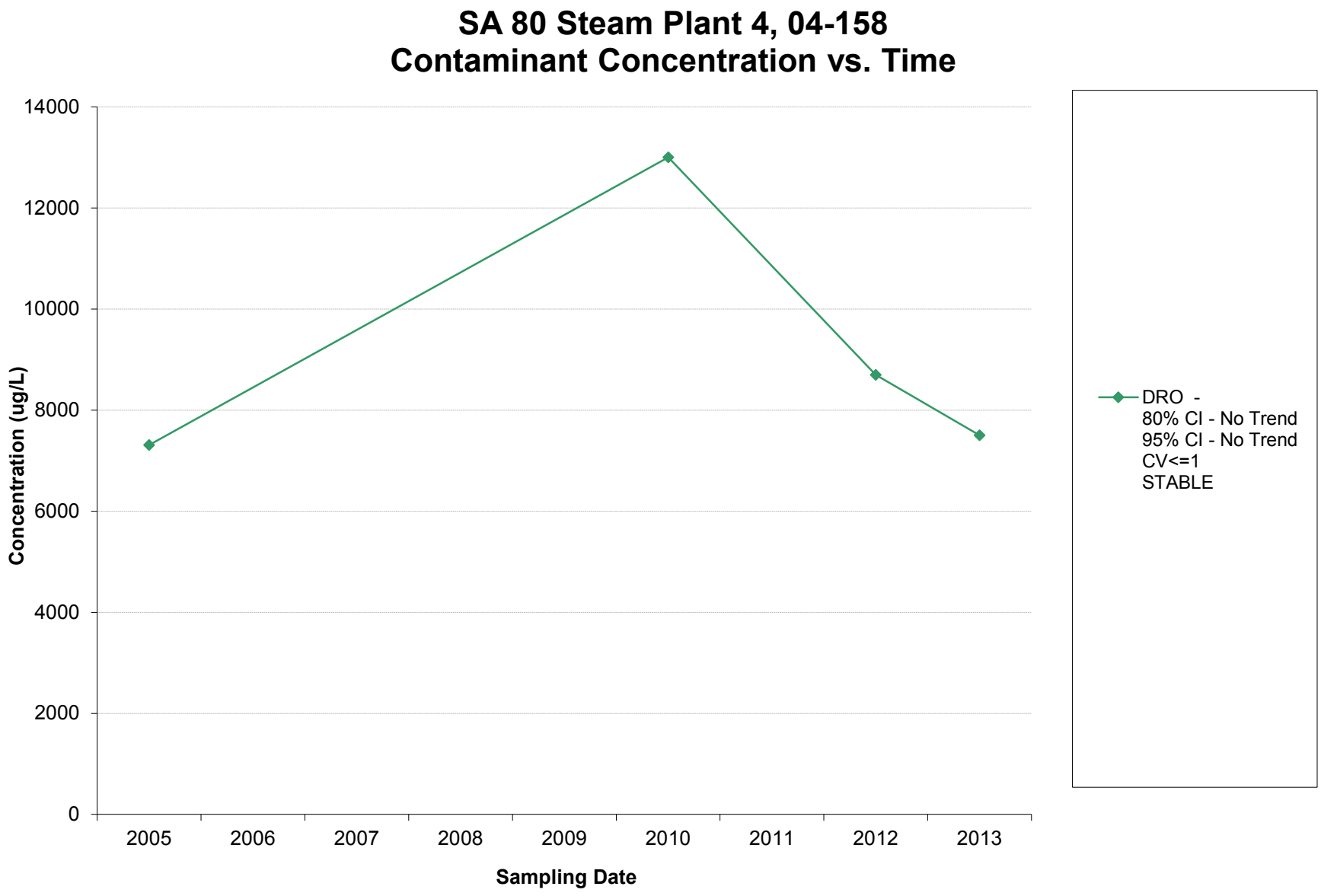
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SA 80	Well Number =	04-158

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/05	**7,310**					
2	10/01/10	**13,000**					
3	10/01/12	**8,700**					
4	10/01/13	**7,500**					
5							
6							
7							
8							
9							
10							

Mann Kendall Statistic (S) =	0	0	0	0	0	0
Number of Rounds (n) =	4	0	0	0	0	0
Average =	9127.50	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2653.995	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.291	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SA 80 Steam Plant 4, 04-158
Contaminant Concentration vs. Time
14000
12000
10000
8000
6000
4000
2000
0
Concentration (ug/L)
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

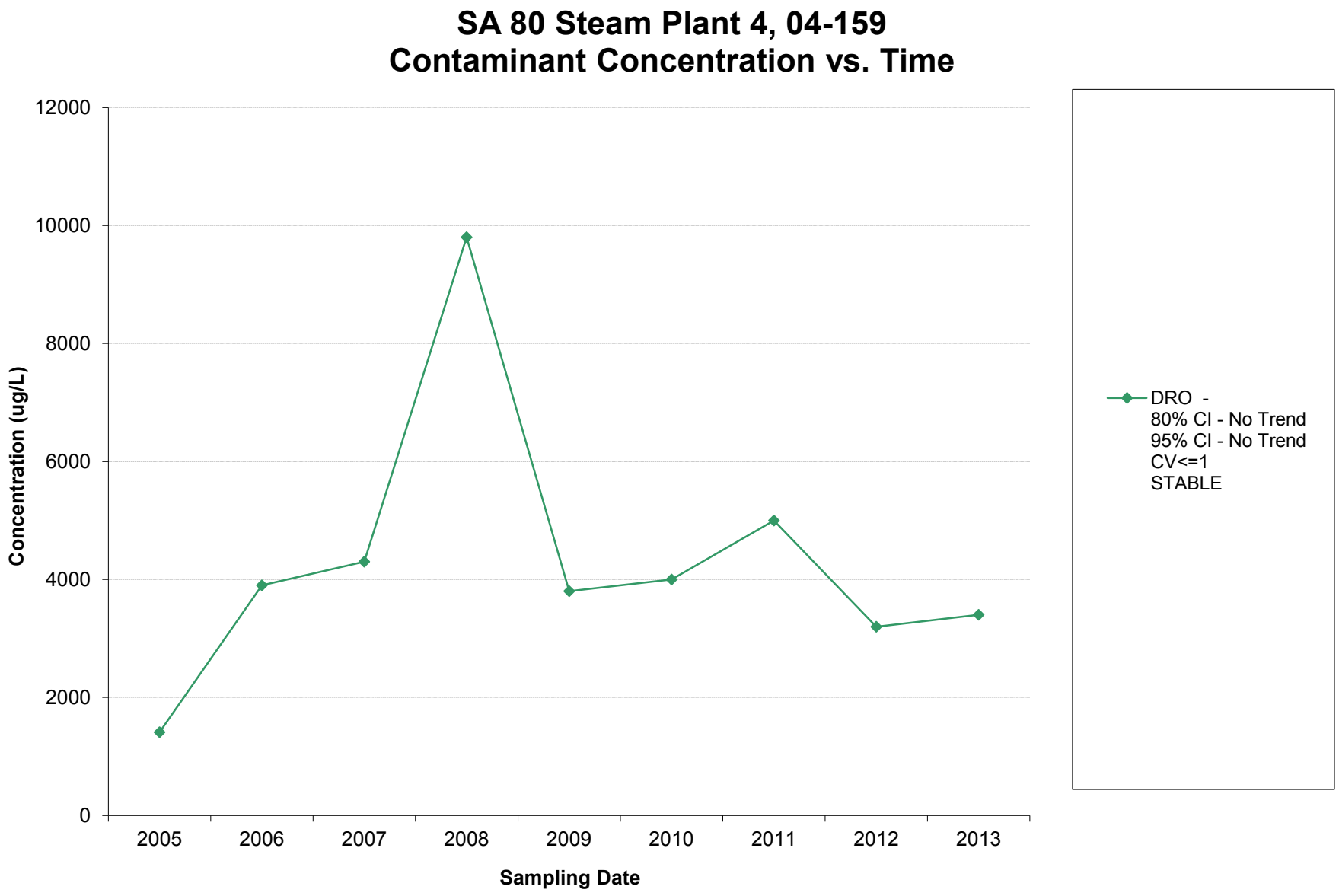
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SA 80	Well Number =	04-159

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/05	**1,410**					
2	10/01/06	**3,900**					
3	10/01/07	**4,300**					
4	10/01/08	**9,800**					
5	10/01/09	**3,800**					
6	10/01/10	**4,000**					
7	10/02/11	**5,000**					
8	10/01/12	**3,200**					
9	10/01/13	**3,400**					
10							

Mann Kendall Statistic (S) =	0	0	0	0	0	0
Number of Rounds (n) =	9	0	0	0	0	0
Average =	4312.22	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2280.646	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.529	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SA 80 Steam Plant 4, 04-159
Contaminant Concentration vs. Time
Concentration (ug/L)
12000
10000
8000
6000
4000
2000
0
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

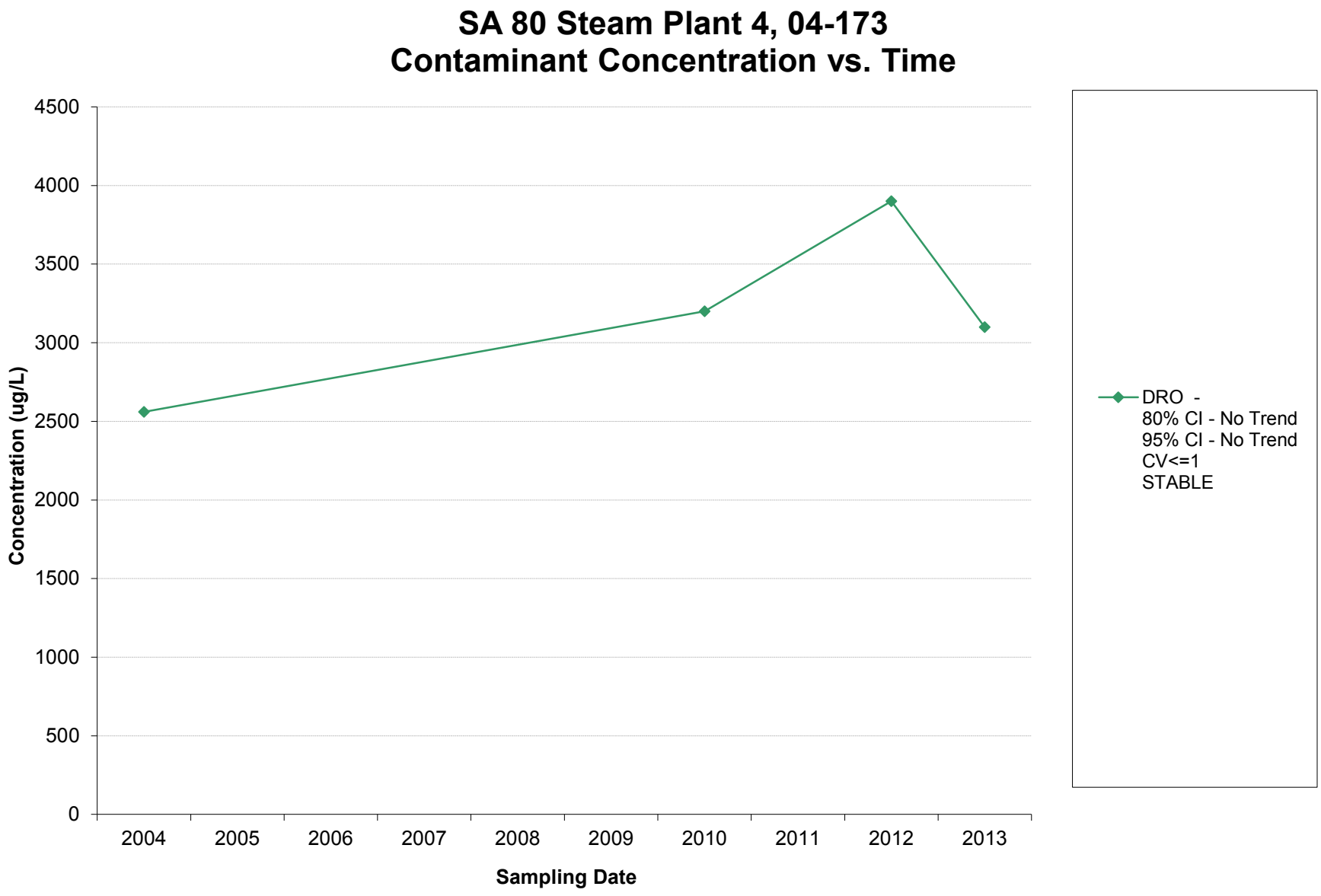
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SA 80	Well Number =	04-173

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**2,560**					
2	10/01/10	**3,200**					
3	10/01/12	**3,900**					
4	10/01/13	**3,100**					
5							
6							
7							
8							
9							
10							

Mann Kendall Statistic (S) =	2	0	0	0	0	0
Number of Rounds (n) =	4	0	0	0	0	0
Average =	3190.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	550.515	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.173	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SA 80 Steam Plant 4, 04-173
Contaminant Concentration vs. Time
Concentration (ug/L)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

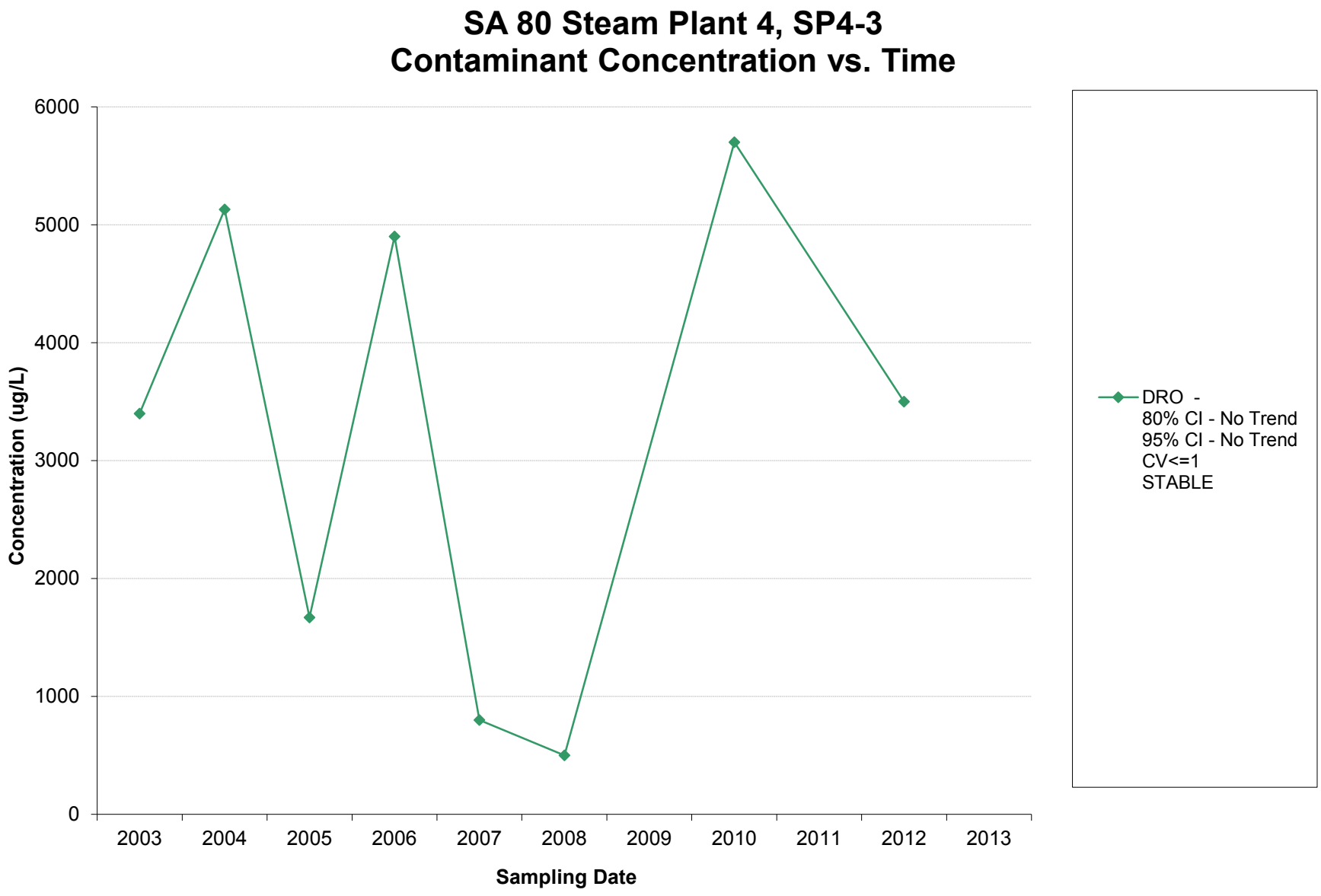
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SA 80	Well Number =	SP4-3

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/03	**3,400**					
2	10/01/04	**5,130**					
3	10/01/05	**1,670**					
4	10/01/06	**4,900**					
5	10/01/07	**800**					
6	10/01/08	**500**					
7	10/01/10	**5,700**					
8	10/01/12	**3,500**					
9	10/01/13	**3,800**					
10							

Mann Kendall Statistic (S) =	0	0	0	0	0	0
Number of Rounds (n) =	9	0	0	0	0	0
Average =	3266.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1894.261	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.580	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP

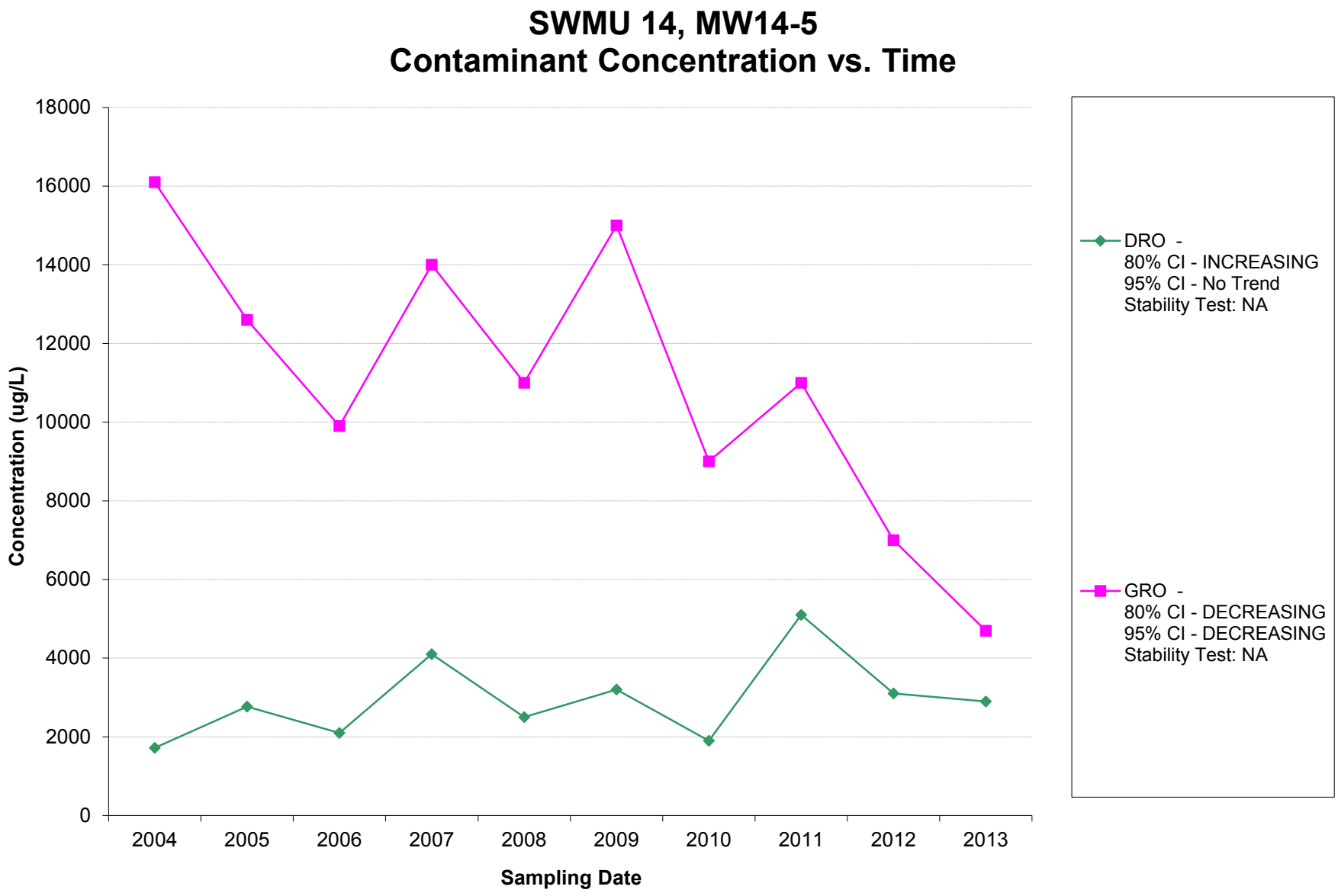

SA 80 Steam Plant 4, SP4-3
Contaminant Concentration vs. Time
Concentration (ug/L)
6000
5000
4000
3000
2000
1000
0
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 14	Well Number =	MW14-5

	Compound ->	DRO	GRO				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**1,720**	**16,100**				
2	10/01/05	**2,770**	**12,600**				
3	10/01/06	**2,100**	**9,900**				
4	10/01/07	**4,100**	**14,000**				
5	10/01/08	**2,500**	**11,000**				
6	10/01/09	**3,200**	**15,000**				
7	10/01/10	**1,900**	**9,000**				
8	10/01/11	**5,100**	**11,000**				
9	10/01/12	**3,100**	**7,000**				
10	10/01/13	**2,900**	**4,700**				
	Mann Kendall Statistic (S) =	13	-26	0	0	0	0
	Number of Rounds (n) =	10	10	0	0	0	0
	Average =	2939.00	11030.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Standard Deviation =	1033.016	3566.215	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.351	0.323	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected				**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**		**INCREASING**	**DECREASING**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**		**No Trend**	**DECREASING**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level		**NA**	**NA**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 14, MW14-5
Contaminant Concentration vs. Time
Concentration (ug/L)
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - INCREASING
95% CI - No Trend
Stability Test: NA
GRO -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA

Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 14	Well Number =	MW14-5

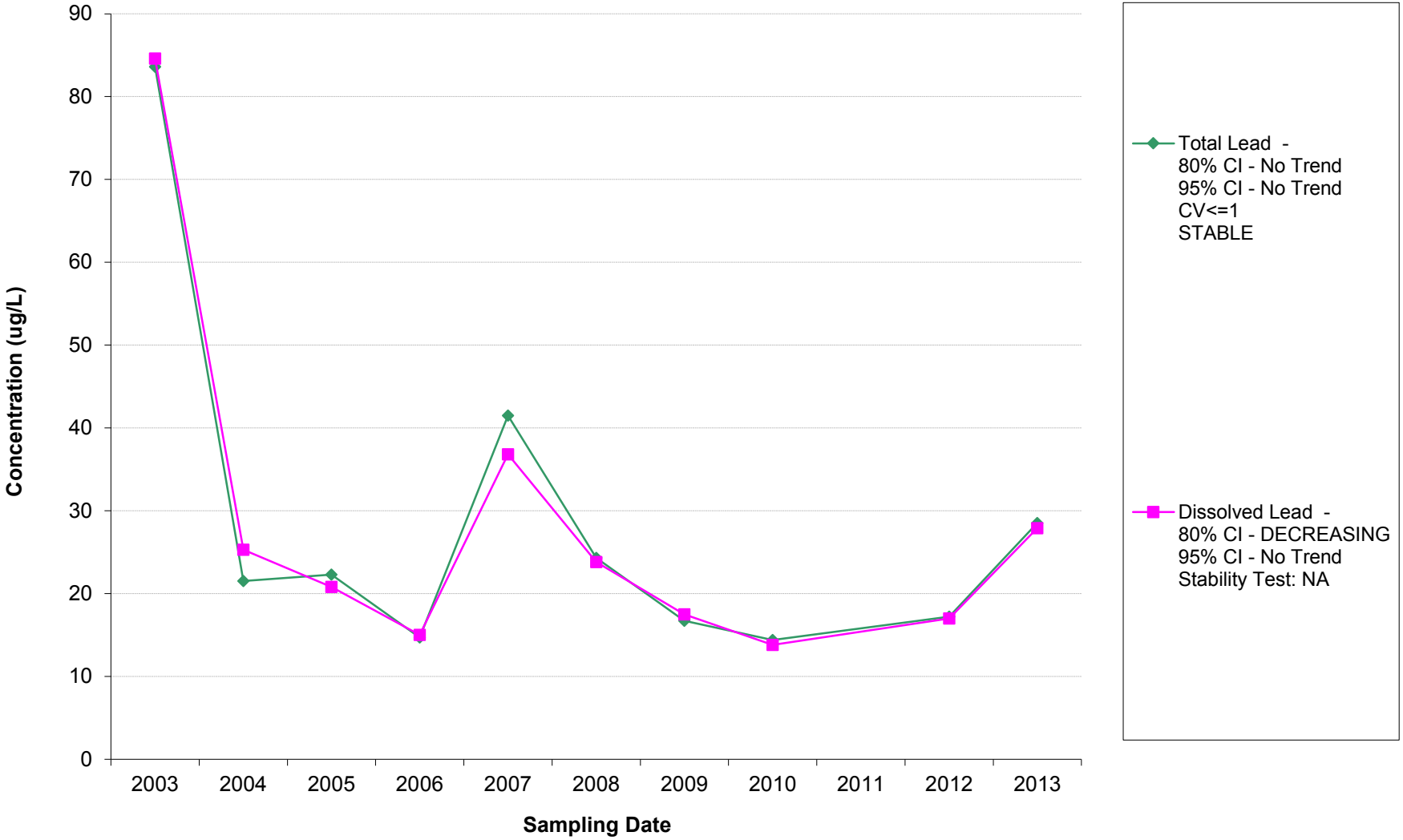
	Compound ->	Total Lead	Dissolved Lead				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/03	**83.6**	**84.6**				
2	10/01/04	**21.5**	**25.3**				
3	10/01/05	**22.3**	**20.8**				
4	10/01/06	**14.7**	**15**				
5	10/01/07	**41.5**	**36.8**				
6	10/01/08	**24.3**	**23.8**				
7	10/01/09	**16.7**	**17.5**				
8	10/01/10	**14.4**	**13.8**				
9	10/01/12	**17.2**	**17**				
10	10/01/13	**28.5**	**27.9**				

Mann Kendall Statistic (S) =	-9	-15	0	0	0	0
Number of Rounds (n) =	10	10	0	0	0	0
Average =	28.47	28.25	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	20.993	20.974	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.737	0.742	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Error Check, Blank if No Errors Detected			**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**	**No Trend**	**DECREASING**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**No Trend**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**		**n<4**	**n<4**	**n<4**	**n<4**
	STABLE	**NA**	**n<4**	**n<4**	**n<4**	**n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP

SWMU 14, MW14-5
Contaminant Concentration vs. Time

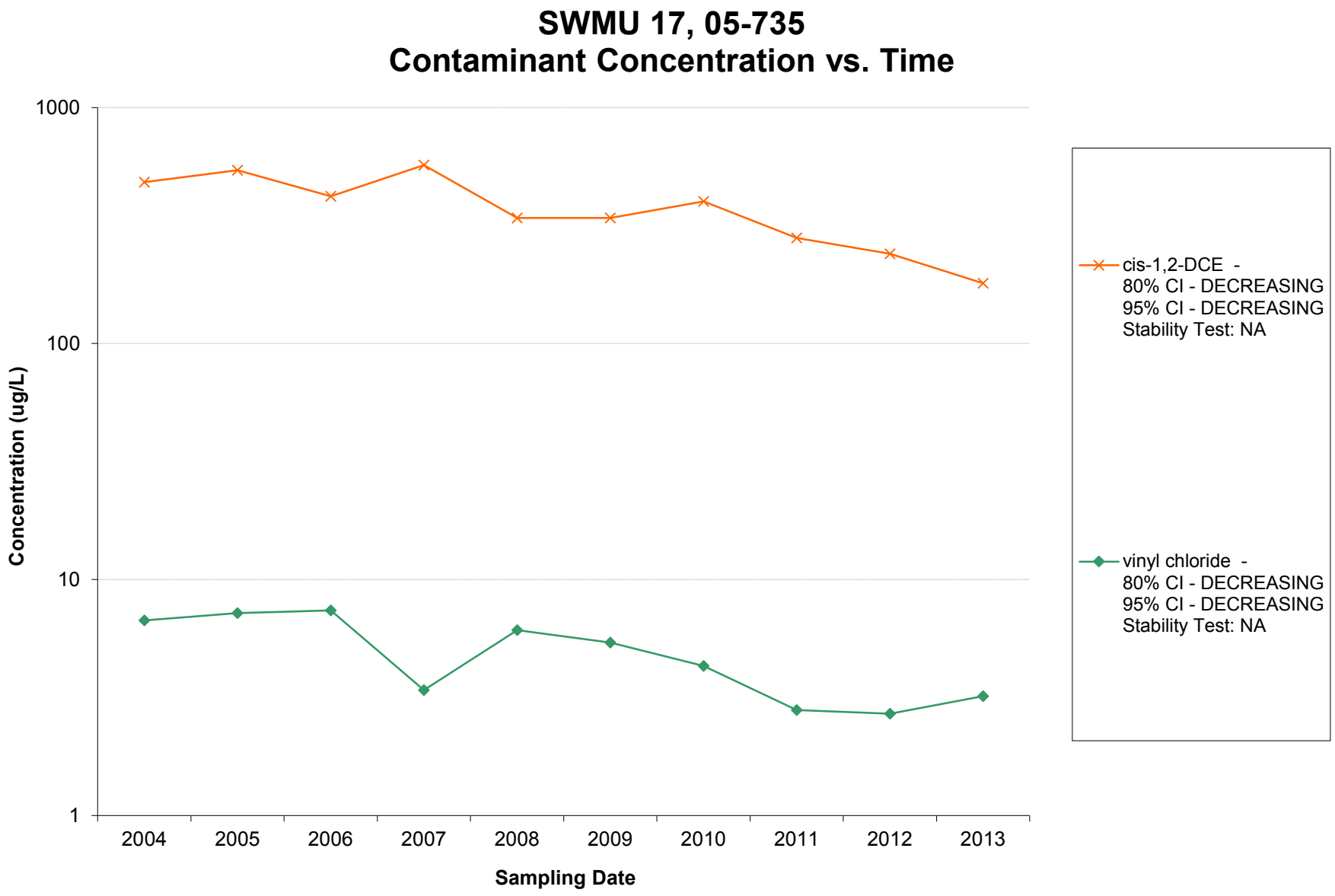


Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 17	Well Number =	05-735

	Compound ->	cis-1,2-DCE	vinyl chloride				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**483**	**6.7**				
2	10/01/05	**542**	**7.2**				
3	10/01/06	**420**	**7.4**				
4	10/01/07	**570**	**3.4**				
5	10/01/08	**340**	**6.1**				
6	10/01/09	**340**	**5.4**				
7	10/01/10	**400**	**4.3**				
8	10/01/11	**280**	**2.8**				
9	10/01/12	**240**	**2.7**				
10	10/01/13	**180**	**3.2**				
	Mann Kendall Statistic (S) =	-32	-29	0	0	0	0
	Number of Rounds (n) =	10	10	0	0	0	0
	Average =	379.50	4.92	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Standard Deviation =	128.128	1.862	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.338	0.379	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected				**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**		**DECREASING**	**DECREASING**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**		**DECREASING**	**DECREASING**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level		**NA**	**NA**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 17, 05-735
Contaminant Concentration vs. Time
1000
100
10
1
Concentration (ug/L)
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
cis-1,2-DCE -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA
vinyl chloride -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA

Mann-Kendall Statistical Test

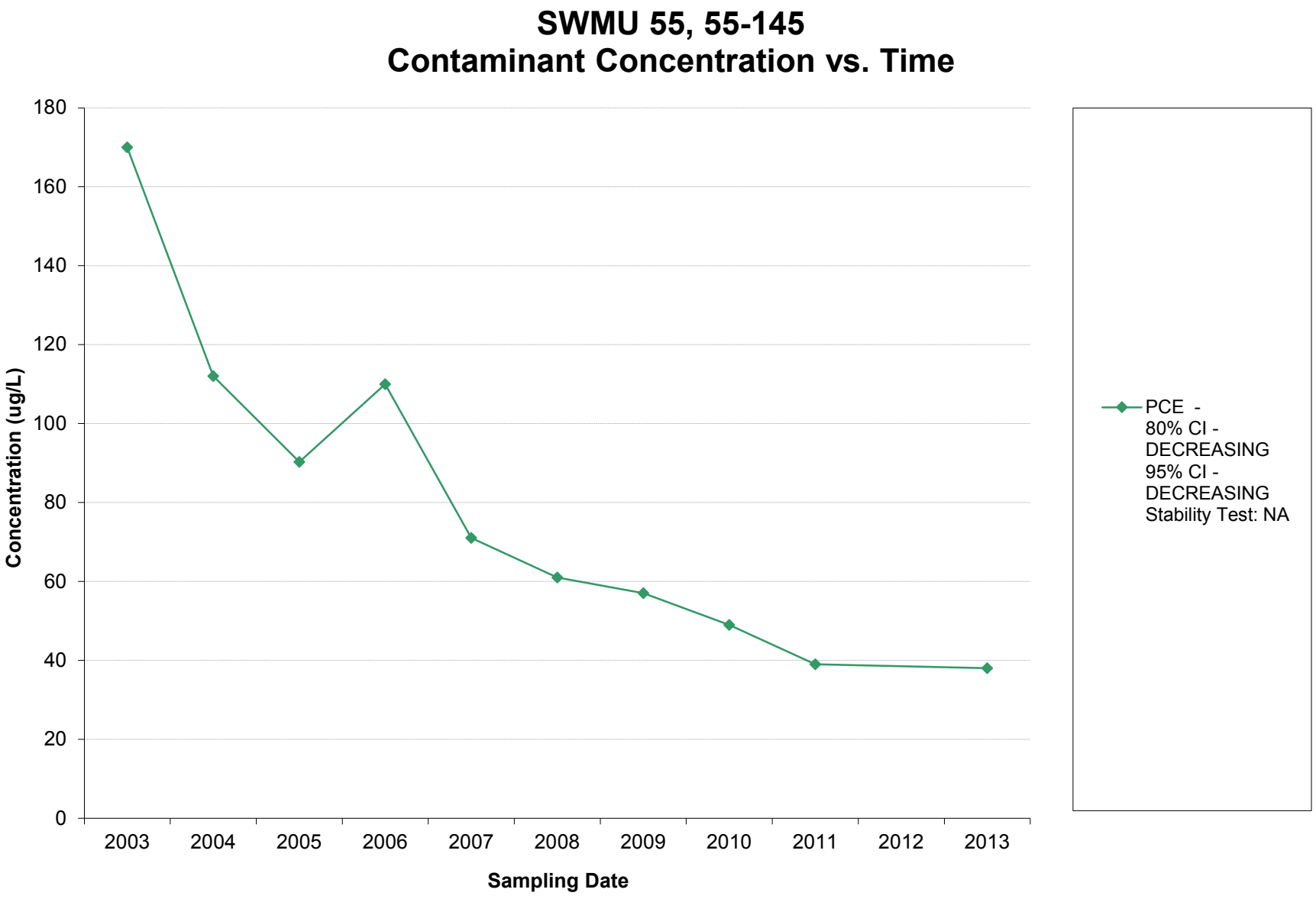
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 55	Well Number =	55-145

	Compound ->	PCE					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/03	**170**					
2	10/01/04	**112**					
3	10/01/05	**90.3**					
4	10/01/06	**110**					
5	10/01/07	**71**					
6	10/01/08	**61**					
7	10/01/09	**57**					
8	10/01/10	**49**					
9	10/01/11	**39**					
10	10/01/13	**38**					

Mann Kendall Statistic (S) =	-43	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	79.73	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	41.508	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.521	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 55, 55-145
Contaminant Concentration vs. Time
Concentration (ug/L)
180
160
140
120
100
80
60
40
20
0
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
PCE -
80% CI -
DECREASING
95% CI -
DECREASING
Stability Test: NA

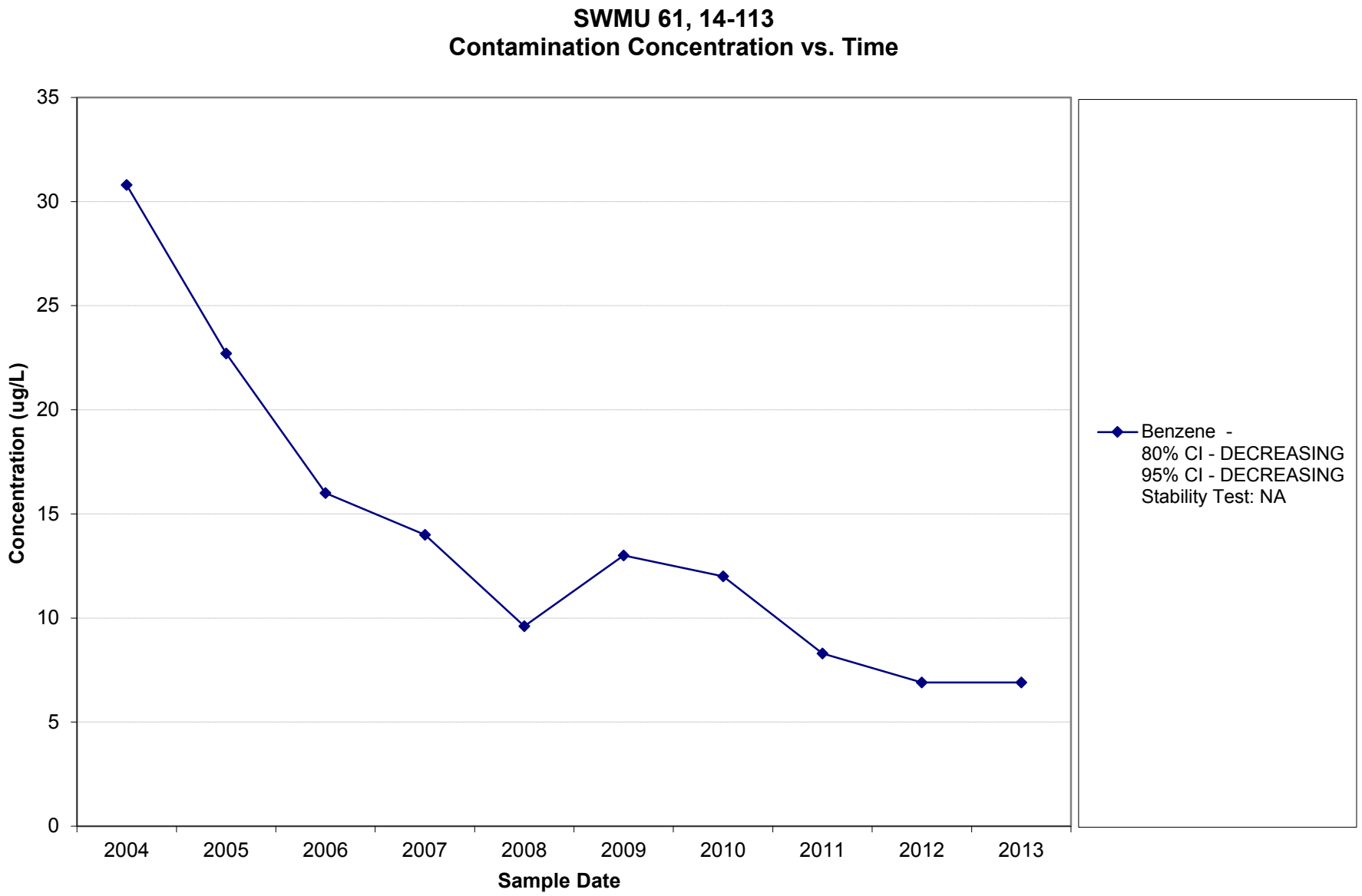
Mann-Kendall Statistical Test

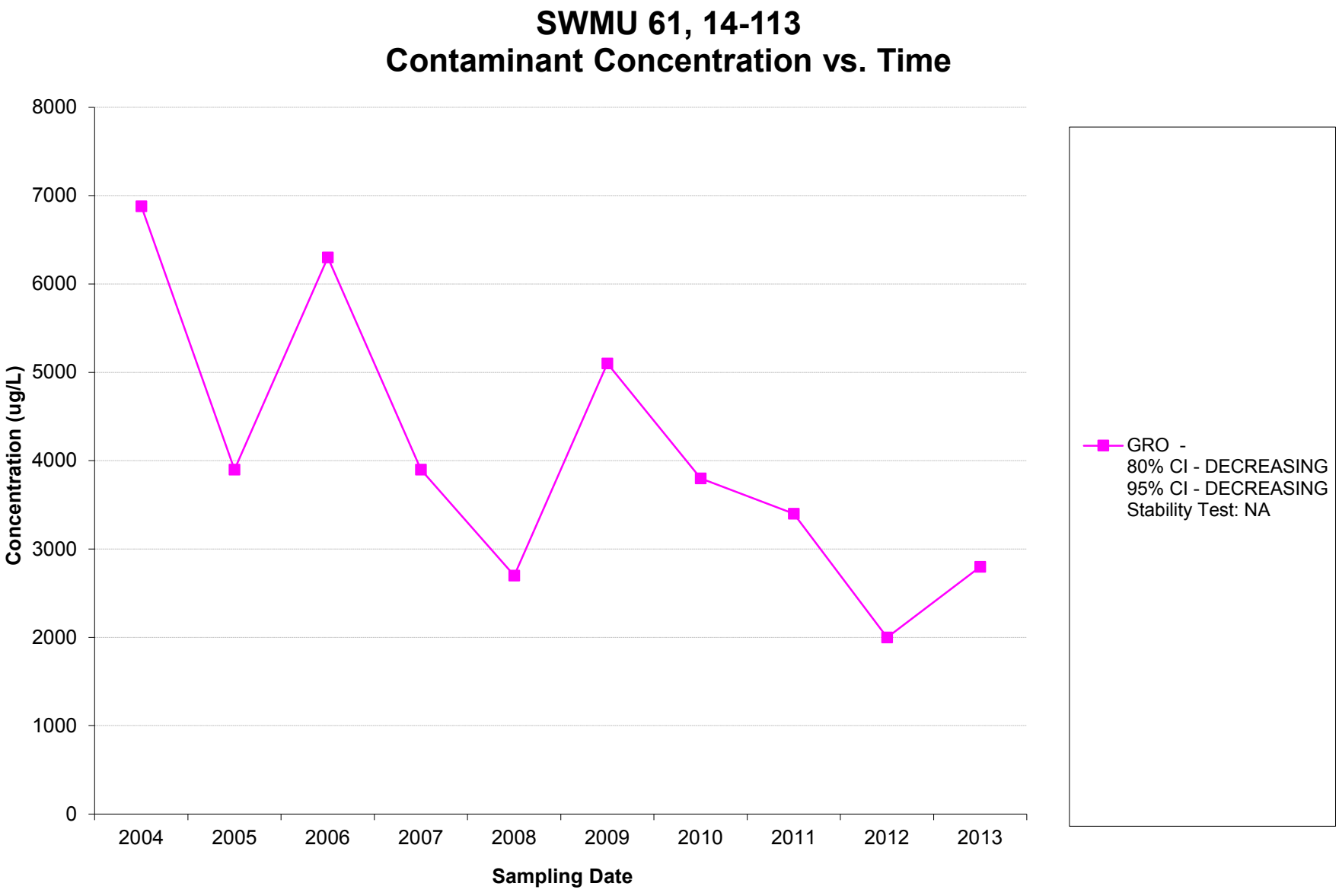
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 61	Well Number =	14-113

	Compound ->	Benzene	GRO				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**30.8**	**6,880**				
2	10/01/05	**22.7**	**3,900**				
3	10/01/06	**16**	**6,300**				
4	10/01/07	**14**	**3,900**				
5	10/01/08	**9.6**	**2,700**				
6	10/01/09	**13**	**5,100**				
7	10/01/10	**12**	**3,800**				
8	10/01/11	**8.3**	**3,400**				
9	10/01/12	**6.9**	**2,000**				
10	10/01/13	**6.9**	**2,800**				

Mann Kendall Statistic (S) =	-40	-28	0	0	0	0
Number of Rounds (n) =	10	10	0	0	0	0
Average =	14.02	4078.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	7.598	1573.516	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.542	0.386	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected			**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**	**DECREASING**	**DECREASING**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**DECREASING**	**DECREASING**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	**NA**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 61, 14-113
Contamination Concentration vs. Time
Concentration (ug/L)
35
30
25
20
15
10
5
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sample Date
Benzene -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA


SWMU 61, 14-113
Contaminant Concentration vs. Time
Concentration (ug/L)
8000
7000
6000
5000
4000
3000
2000
1000
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA

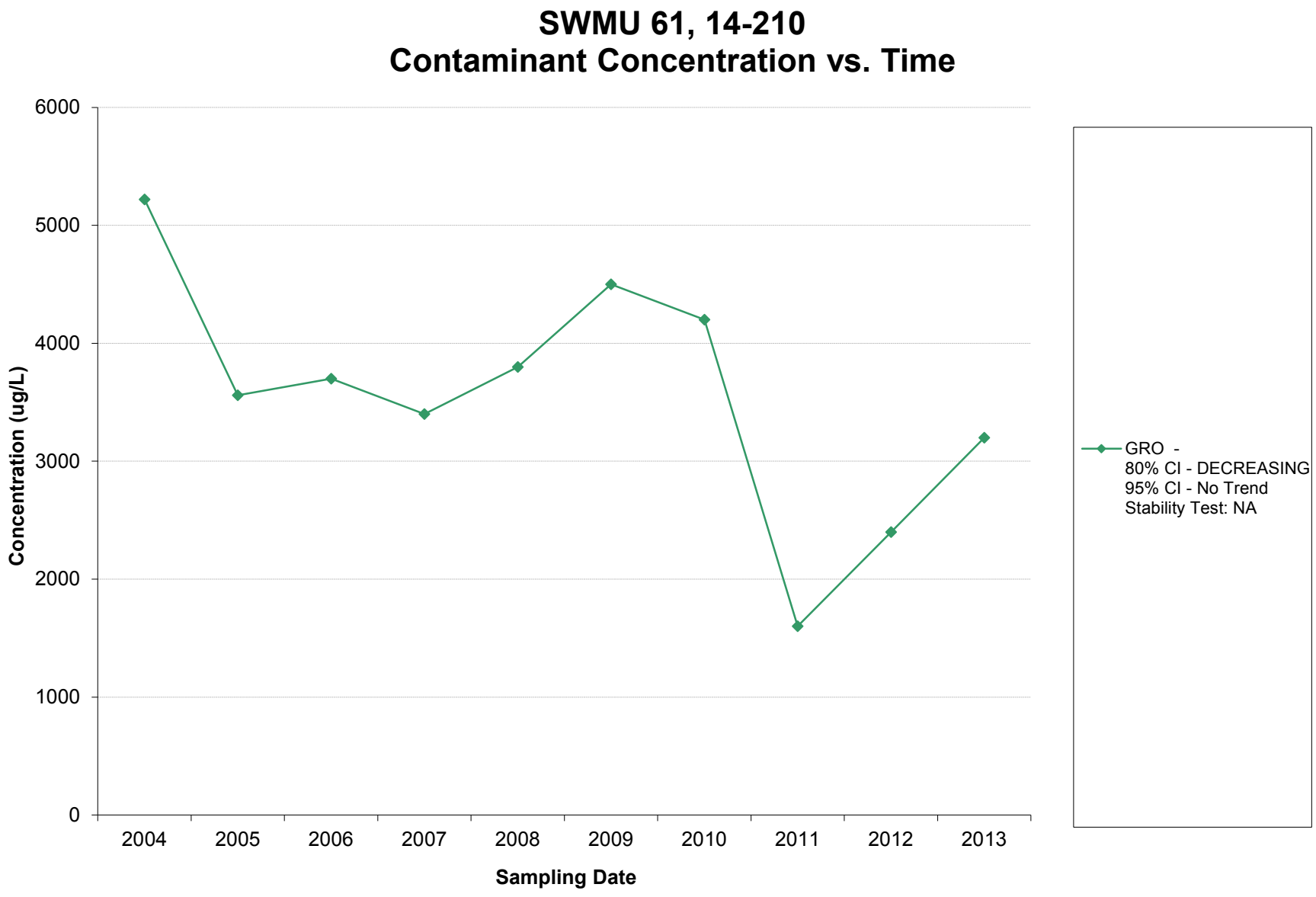
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 61	Well Number =	14-210

	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**5,220**					
2	10/01/05	**3,560**					
3	10/01/06	**3,700**					
4	10/01/07	**3,400**					
5	10/01/08	**3,800**					
6	10/01/09	**4,500**					
7	10/01/10	**4,200**					
8	10/01/11	**1,600**					
9	10/01/12	**2,400**					
10	10/01/13	**3,200**					

Mann Kendall Statistic (S) =	-15	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	3558.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1025.690	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.288	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 61, 14-210
Contaminant Concentration vs. Time
6000
5000
4000
3000
2000
1000
0
Concentration (ug/L)
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - DECREASING
95% CI - No Trend
Stability Test: NA

Mann-Kendall Statistical Test

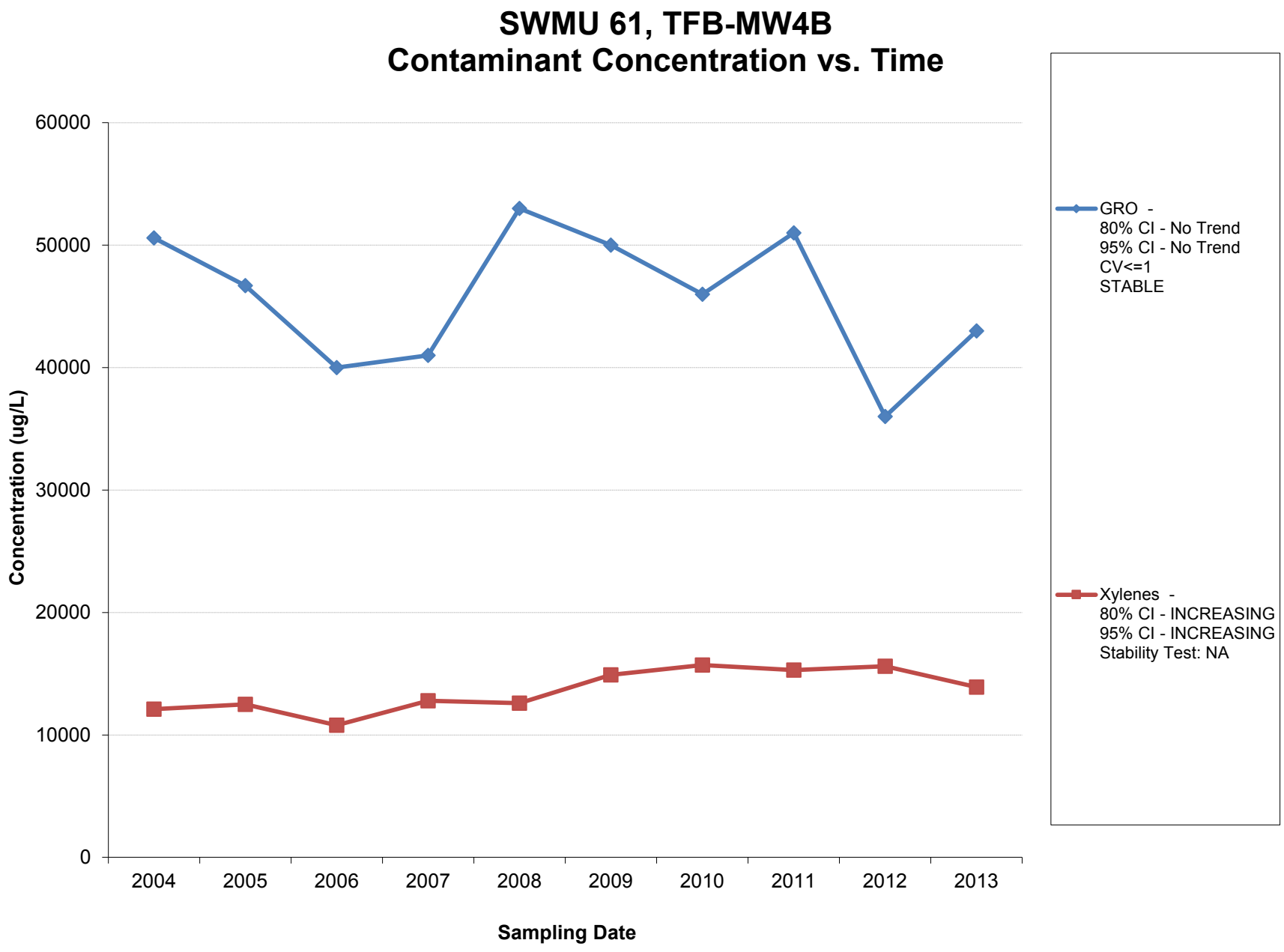
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 61	Well Number =	TFB-MW4B

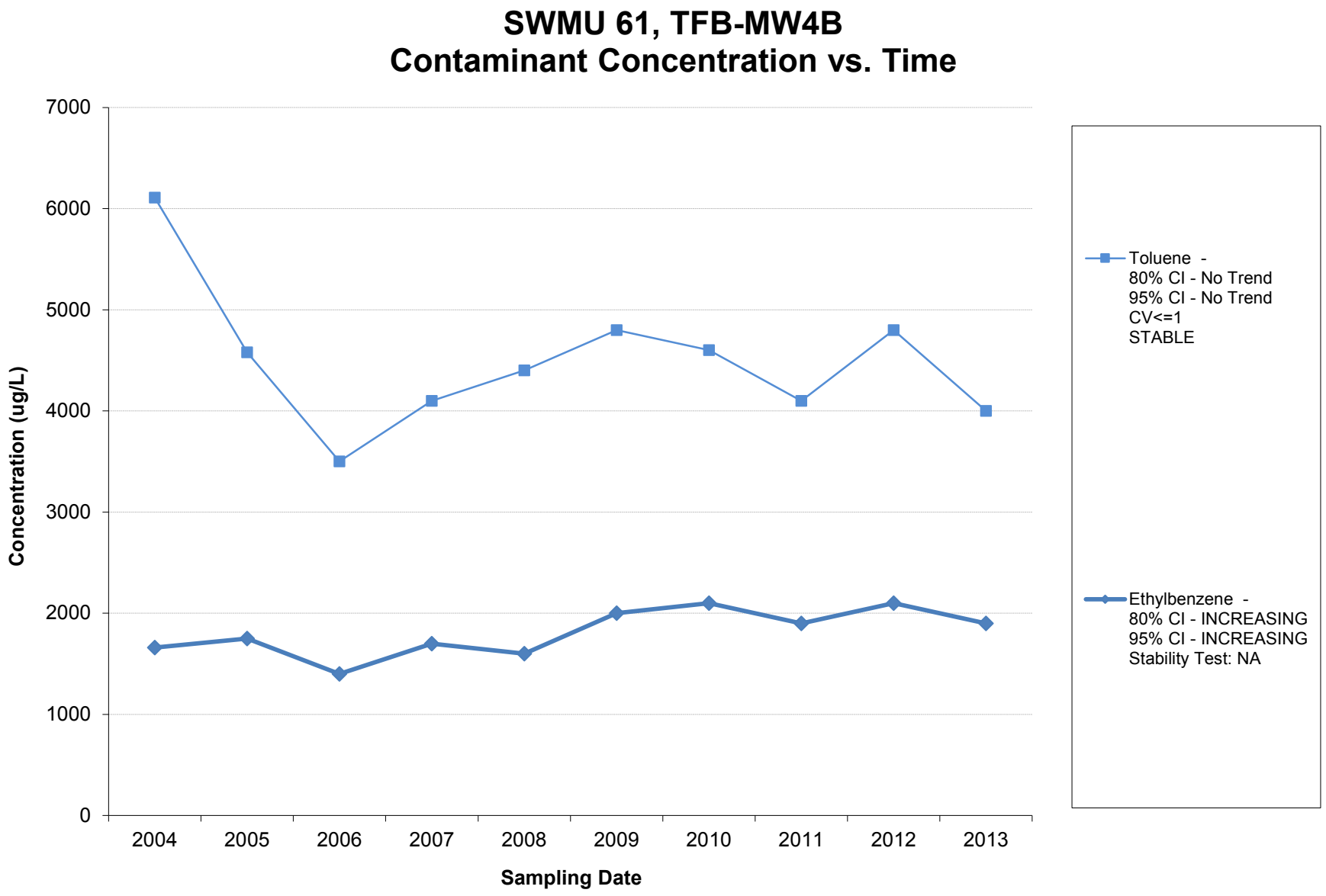
	Compound ->	Benzene	GRO	Toluene	Ethylbenzene	Xylenes	
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**69**	**50,600**	**6,110**	**1,660**	**12,100**	
2	10/01/05	**49.5**	**46,700**	**4,580**	**1,750**	**12,500**	
3	10/01/06	**31**	**40,000**	**3,500**	**1,400**	**10,800**	
4	10/01/07	**39**	**41,000**	**4,100**	**1,700**	**12,800**	
5	10/01/08	**29**	**53,000**	**4,400**	**1,600**	**12,600**	
6	10/01/09	**31**	**50,000**	**4,800**	**2,000**	**14,900**	
7	10/01/10	**30**	**46,000**	**4,600**	**2,100**	**15,700**	
8	10/01/11	**23**	**51,000**	**4,100**	**1,900**	**15,300**	
9	10/01/12	**24**	**36,000**	**4,800**	**2,100**	**15,600**	
10	10/01/13	**20**	**43,000**	**4,000**	**1,900**	**13,900**	

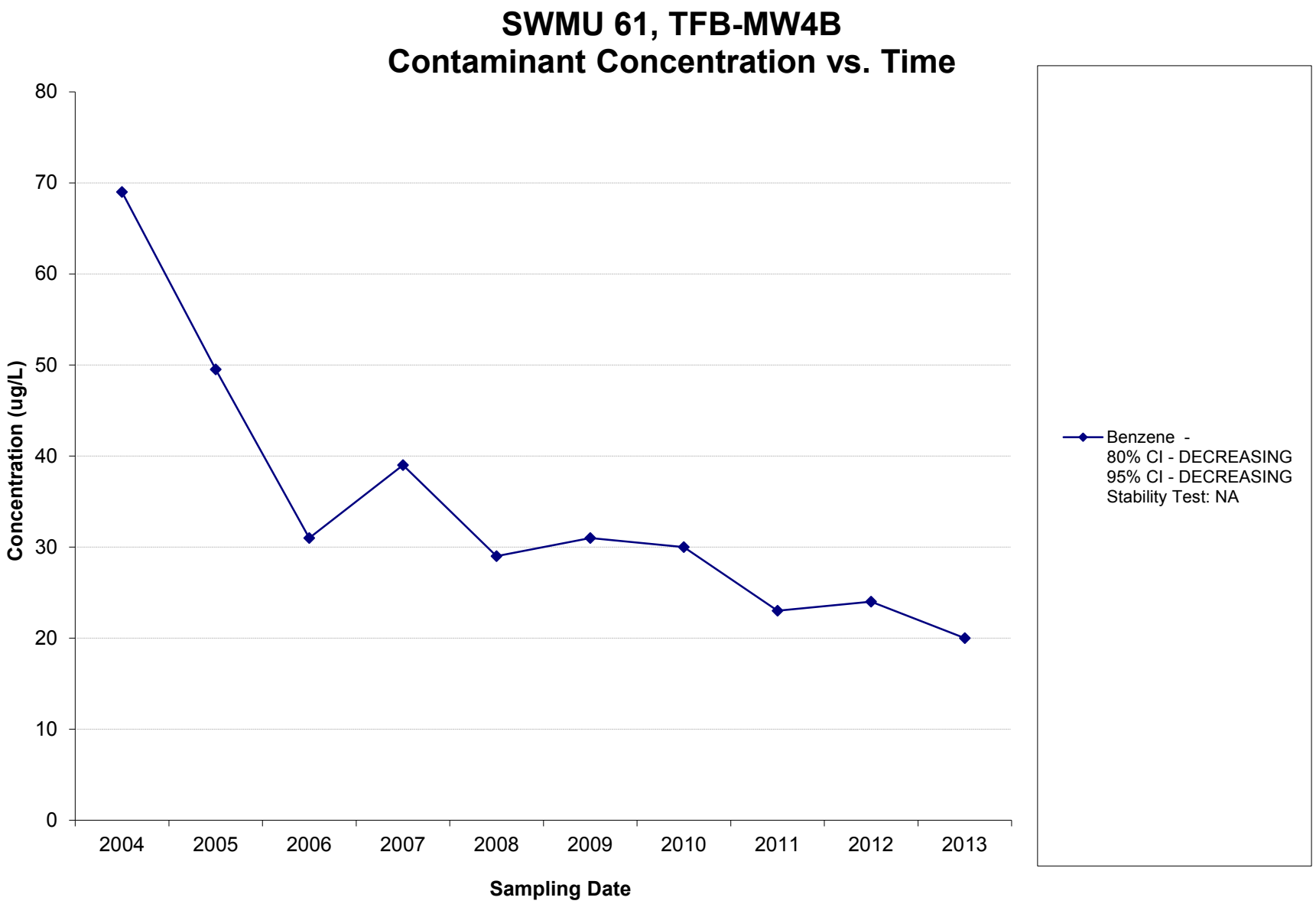
Mann Kendall Statistic (S) =	-36	-7	-5	21	27	0
Number of Rounds (n) =	10	10	10	10	10	0
Average =	34.55	45730.00	4499.00	1811.00	13620.00	#DIV/0!
Standard Deviation =	14.769	5586.899	696.698	228.738	1700.196	#DIV/0!
Coefficient of Variation(CV)=	0.427	0.122	0.155	0.126	0.125	#DIV/0!

Error Check, Blank if No Errors Detected						**N<4**
Trend at **80% Confidence Level**	**DECREASING**	**No Trend**	**No Trend**	**INCREASING**	**INCREASING**	**N<4**
Trend at **95% Confidence Level**	**DECREASING**	**No Trend**	**No Trend**	**INCREASING**	**INCREASING**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	**CV<=1 STABLE**	**CV<=1 STABLE**	**NA**	**NA**	**n<4 n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 61, TFB-MW4B
Contaminant Concentration vs. Time
Concentration (ug/L)
60000
50000
40000
30000
20000
10000
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE
Xylenes -
80% CI - INCREASING
95% CI - INCREASING
Stability Test: NA


SWMU 61, TFB-MW4B
Contaminant Concentration vs. Time
Concentration (ug/L)
7000
6000
5000
4000
3000
2000
1000
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
Toluene -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE
Ethylbenzene -
80% CI - INCREASING
95% CI - INCREASING
Stability Test: NA


SWMU 61, TFB-MW4B
Contaminant Concentration vs. Time
Concentration (ug/L)
80
70
60
50
40
30
20
10
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
Benzene -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA

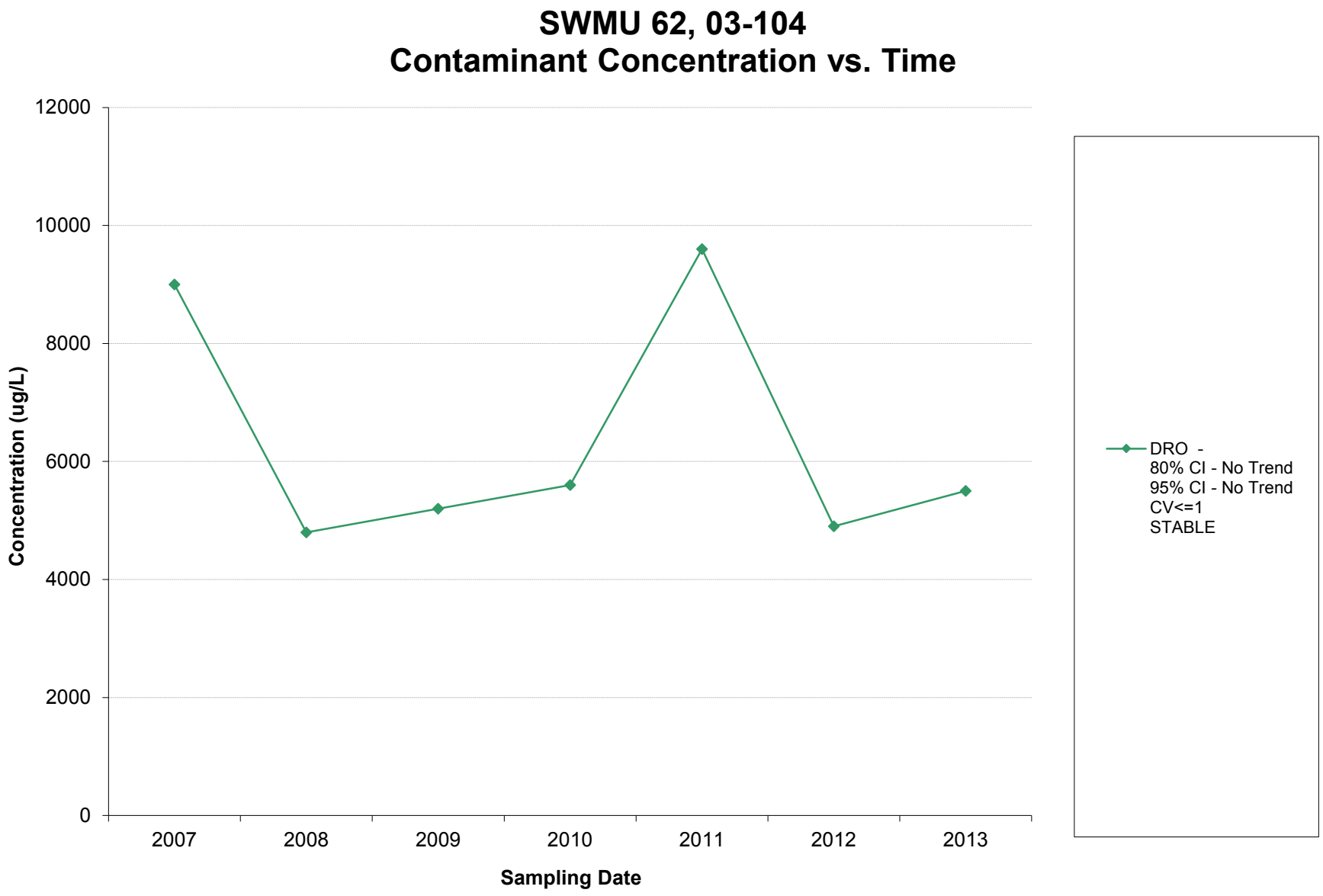
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	03-104

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/07	**9,000**					
2	10/01/08	**4,800**					
3	10/01/09	**5,200**					
4	10/01/10	**5,600**					
5	10/01/11	**9,600**					
6	10/01/12	**4,900**					
7	10/01/13	**5,500**					
8							
9							
10							

Mann Kendall Statistic (S) =	1	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	6371.43	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2028.722	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.318	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, 03-104
Contaminant Concentration vs. Time
12000
10000
8000
6000
4000
2000
0
Concentration (ug/L)
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

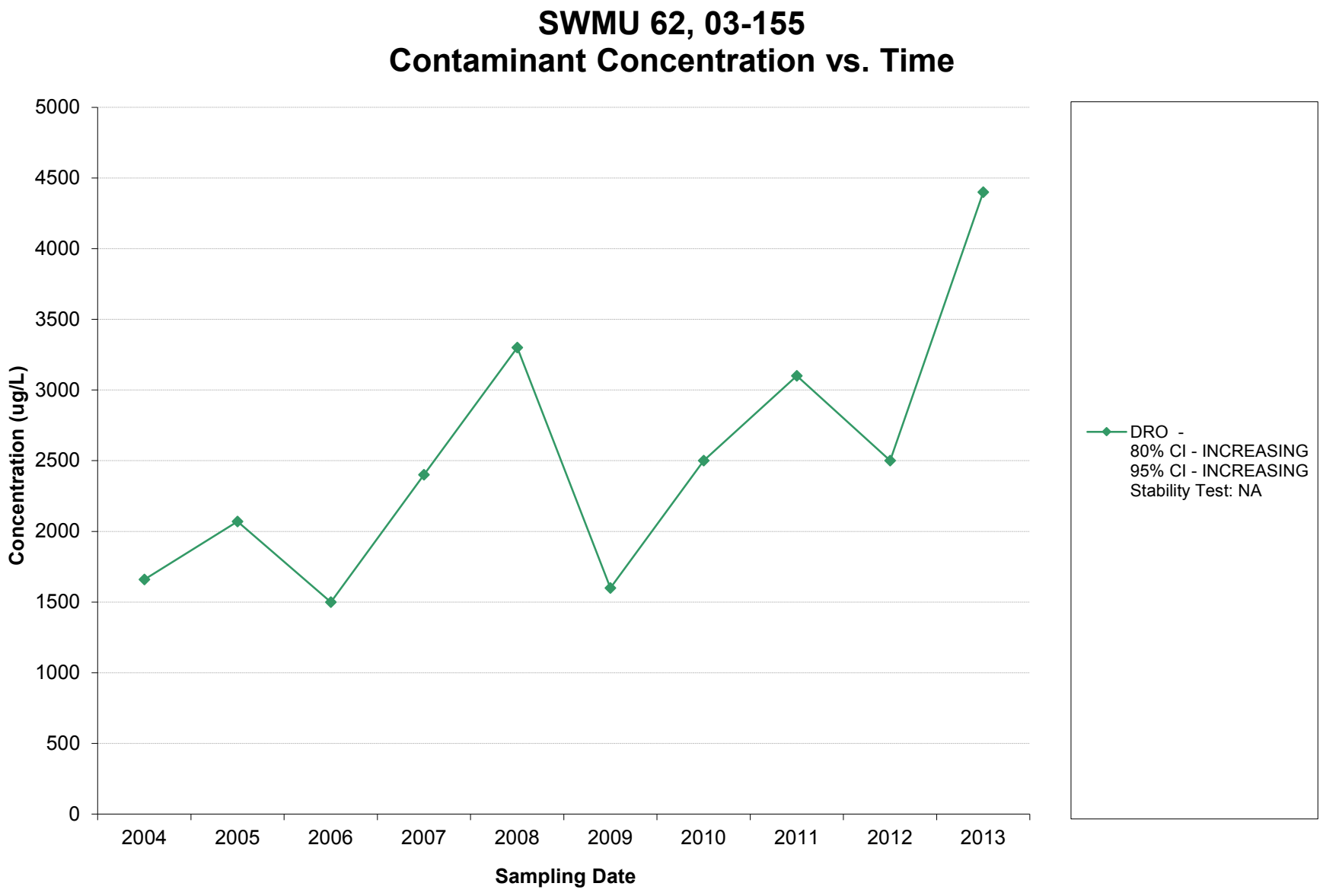
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	03-155

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/04	**1,660**					
2	10/01/05	**2,070**					
3	10/01/06	**1,500**					
4	10/01/07	**2,400**					
5	10/01/08	**3,300**					
6	10/01/09	**1,600**					
7	10/01/10	**2,500**					
8	10/01/11	**3,100**					
9	10/01/12	**2,500**					
10	10/01/13	**4,400**					

Mann Kendall Statistic (S) =	24	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	2503.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	901.875	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.360	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**INCREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**INCREASING**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, 03-155
Contaminant Concentration vs. Time
Concentration (ug/L)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - INCREASING
95% CI - INCREASING
Stability Test: NA

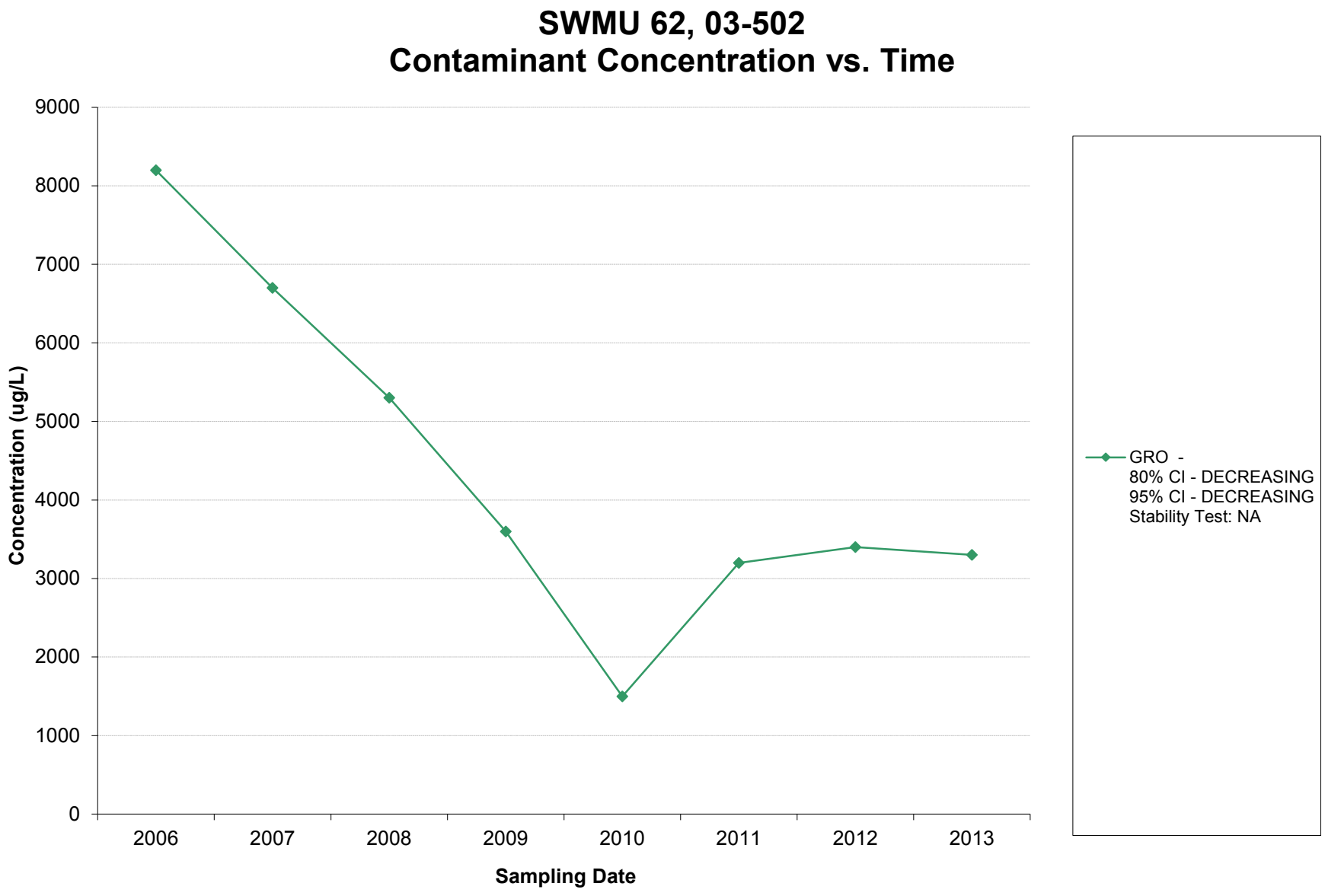
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	03-502

	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**8,200**					
2	10/01/07	**6,700**					
3	10/01/08	**5,300**					
4	10/01/09	**3,600**					
5	10/01/10	**1,500**					
6	10/01/11	**3,200**					
7	10/01/12	**3,400**					
8	10/01/13	**3,300**					
9							
10							

Mann Kendall Statistic (S) =	-18	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	4400.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2179.122	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.495	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, 03-502
Contaminant Concentration vs. Time
Concentration (ug/L)
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA

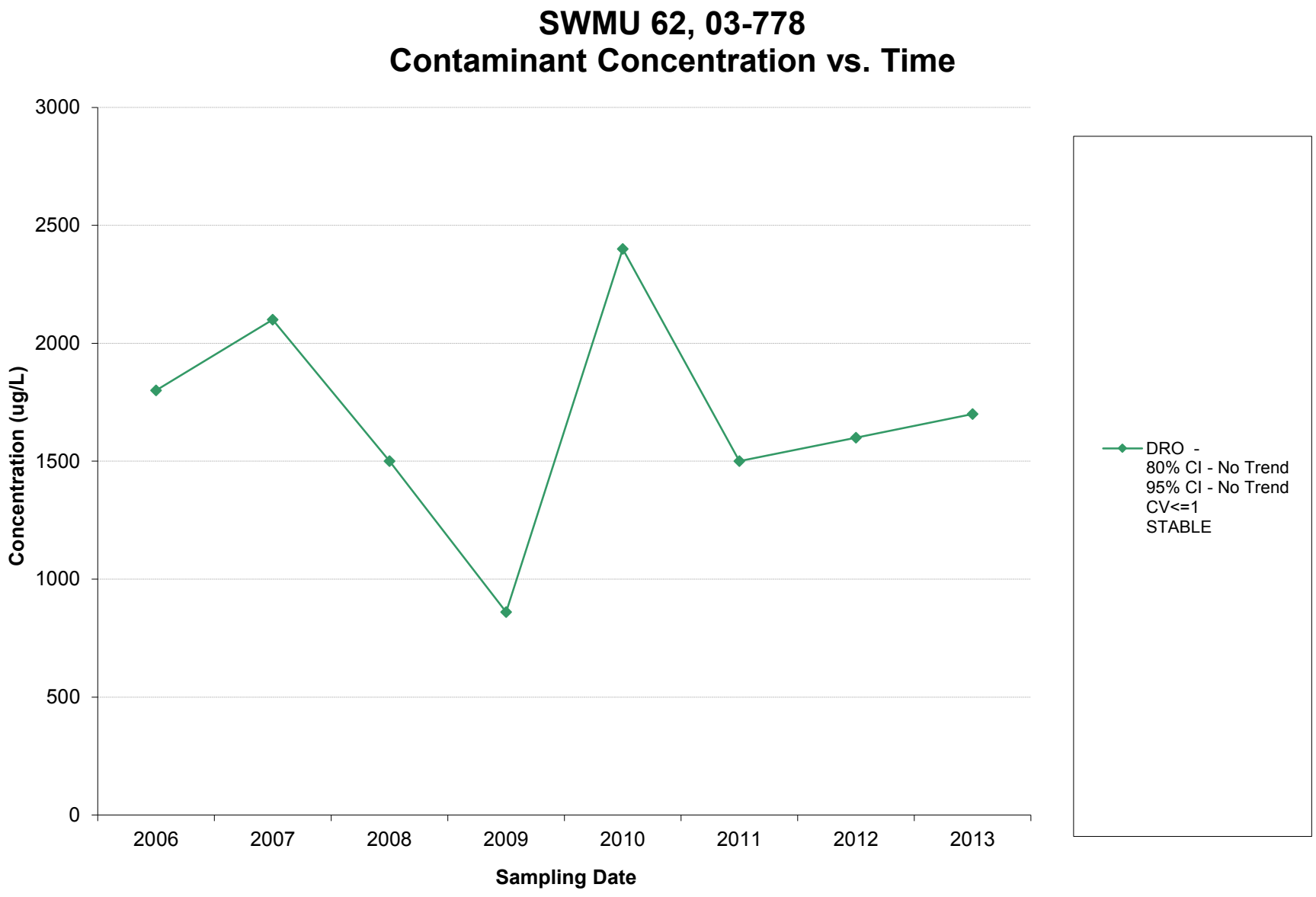
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	03-778

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**1,800**					
2	10/01/07	**2,100**					
3	10/01/08	**1,500**					
4	10/01/09	**860**					
5	10/01/10	**2,400**					
6	10/01/11	**1,500**					
7	10/01/12	**1,600**					
8	10/01/13	**1,700**					
9							
10							

Mann Kendall Statistic (S) =	-1	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	1682.50	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	455.624	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.271	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, 03-778
Contaminant Concentration vs. Time
3000
2500
2000
1500
1000
500
0
Concentration (ug/L)
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

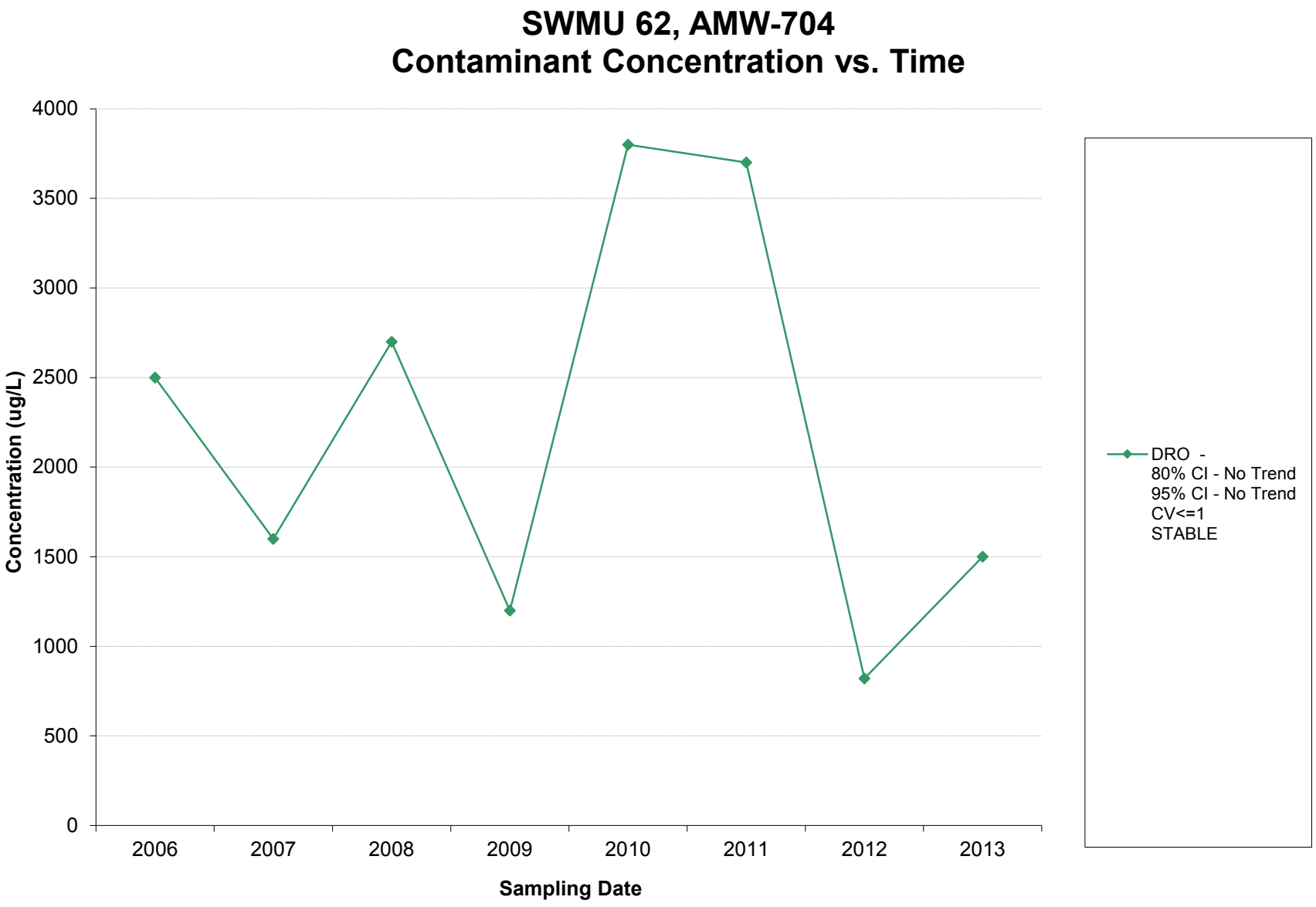
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	AMW-704

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**2500**					
2	10/01/07	**1600**					
3	10/01/08	**2700**					
4	10/01/09	**1200**					
5	10/01/10	**3800**					
6	10/01/11	**3700**					
7	10/01/12	**820**					
8	10/01/13	**1500**					
9							
10							

Mann Kendall Statistic (S) =	-4	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	2227.50	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1127.472	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.506	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	**n<4**	**n<4**	**n<4**	**n<4**	**n<4**
	STABLE	**n<4**	**n<4**	**n<4**	**n<4**	**n<4**

Data Entry By =	CA	Date =	1/7/2014	Checked By =	RB


SWMU 62, AMW-704
Contaminant Concentration vs. Time
Concentration (ug/L)
4000
3500
3000
2500
2000
1500
1000
500
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

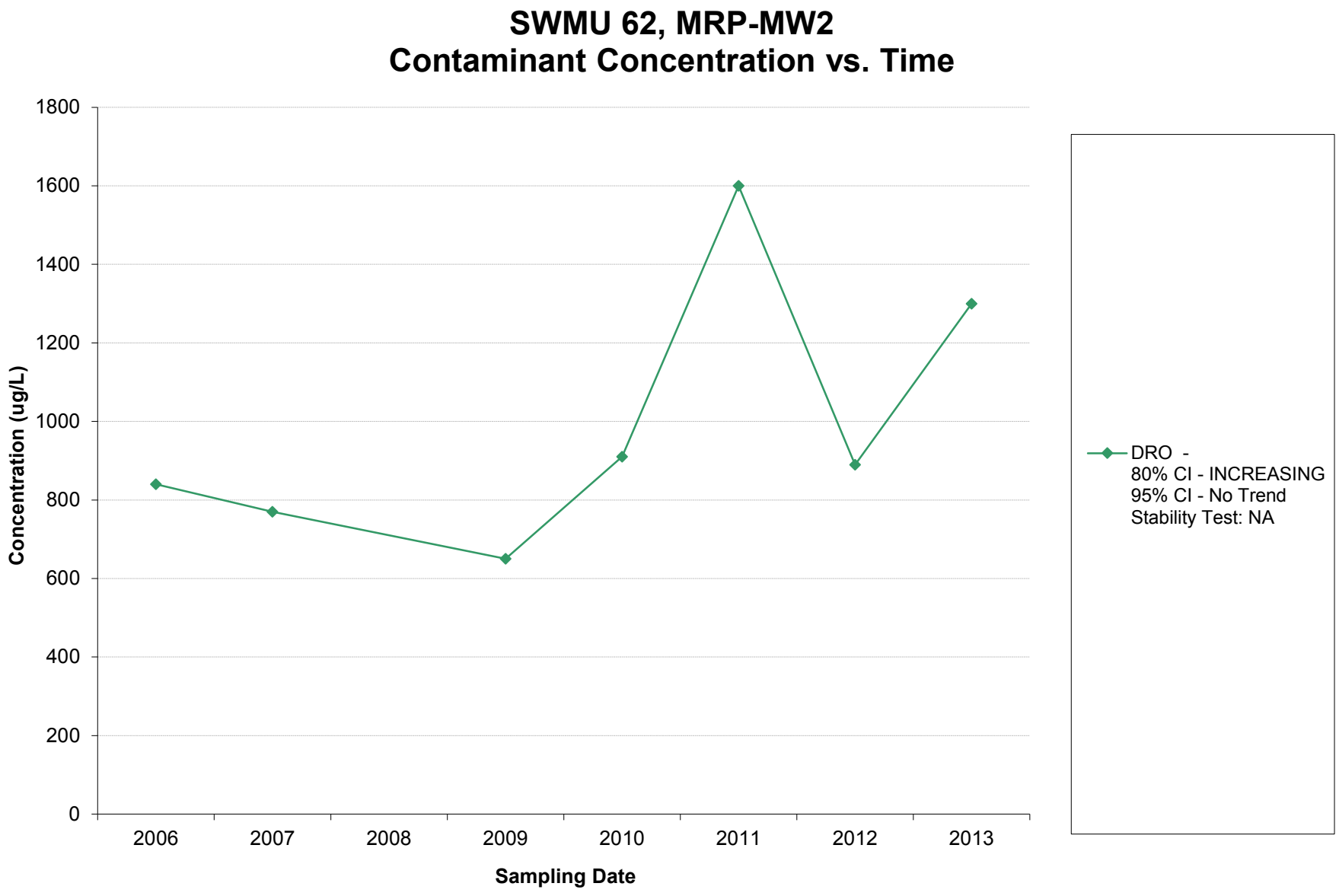
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	MRP-MW2

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**840**					
2	10/01/07	**770**					
3	10/01/09	**650**					
4	10/01/10	**910**					
5	10/01/11	**1600**					
6	10/01/12	**890**					
7	10/01/13	**1300**					
8							
9							
10							

Mann Kendall Statistic (S) =	9	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	994.29	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	334.408	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.336	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**	**INCREASING**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**	**n<4** **n<4**

Data Entry By =	CA	Date =	1/7/2014	Checked By =	RB


SWMU 62, MRP-MW2
Contaminant Concentration vs. Time
Concentration (ug/L)
1800
1600
1400
1200
1000
800
600
400
200
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - INCREASING
95% CI - No Trend
Stability Test: NA

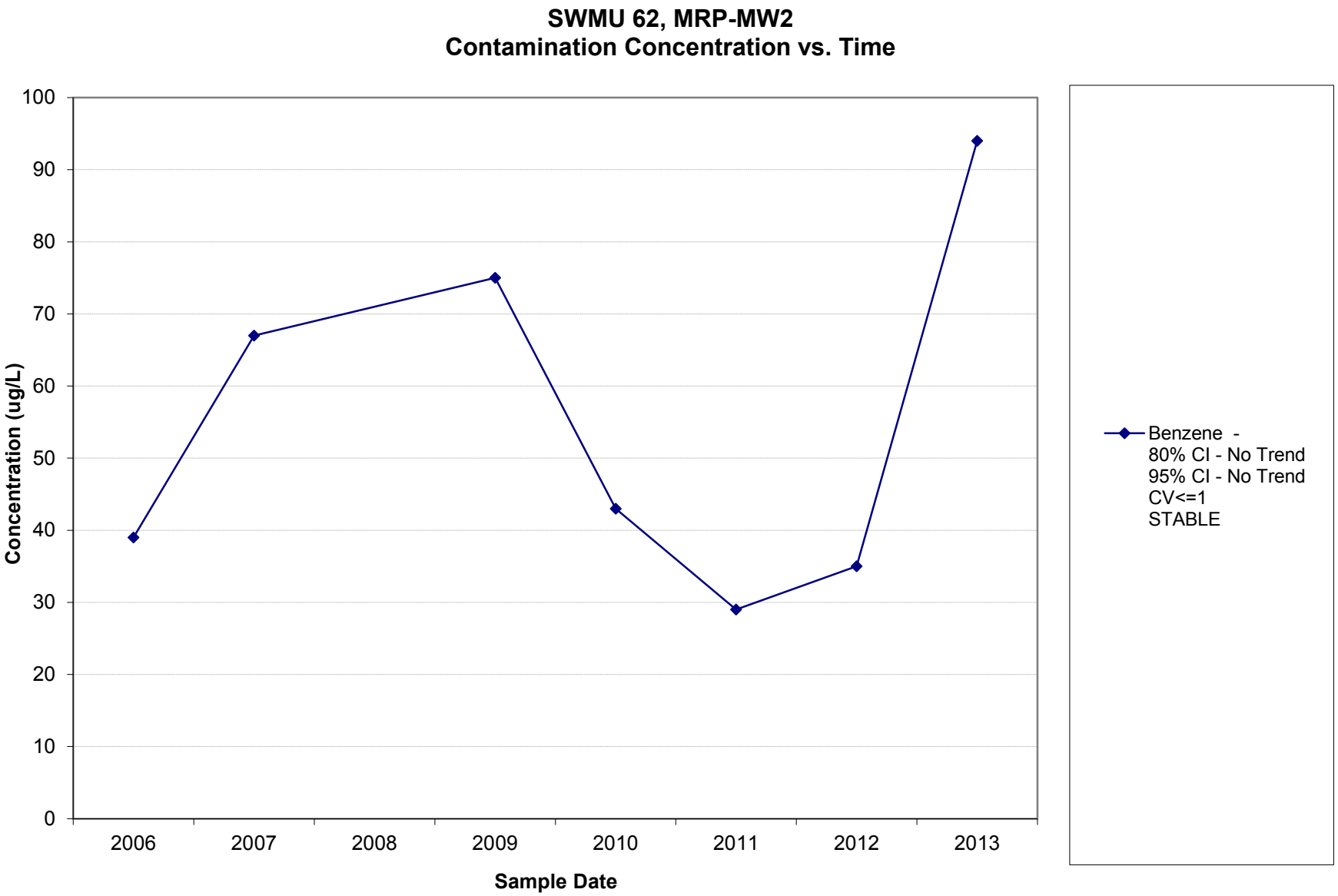
Mann-Kendall Statistical Test

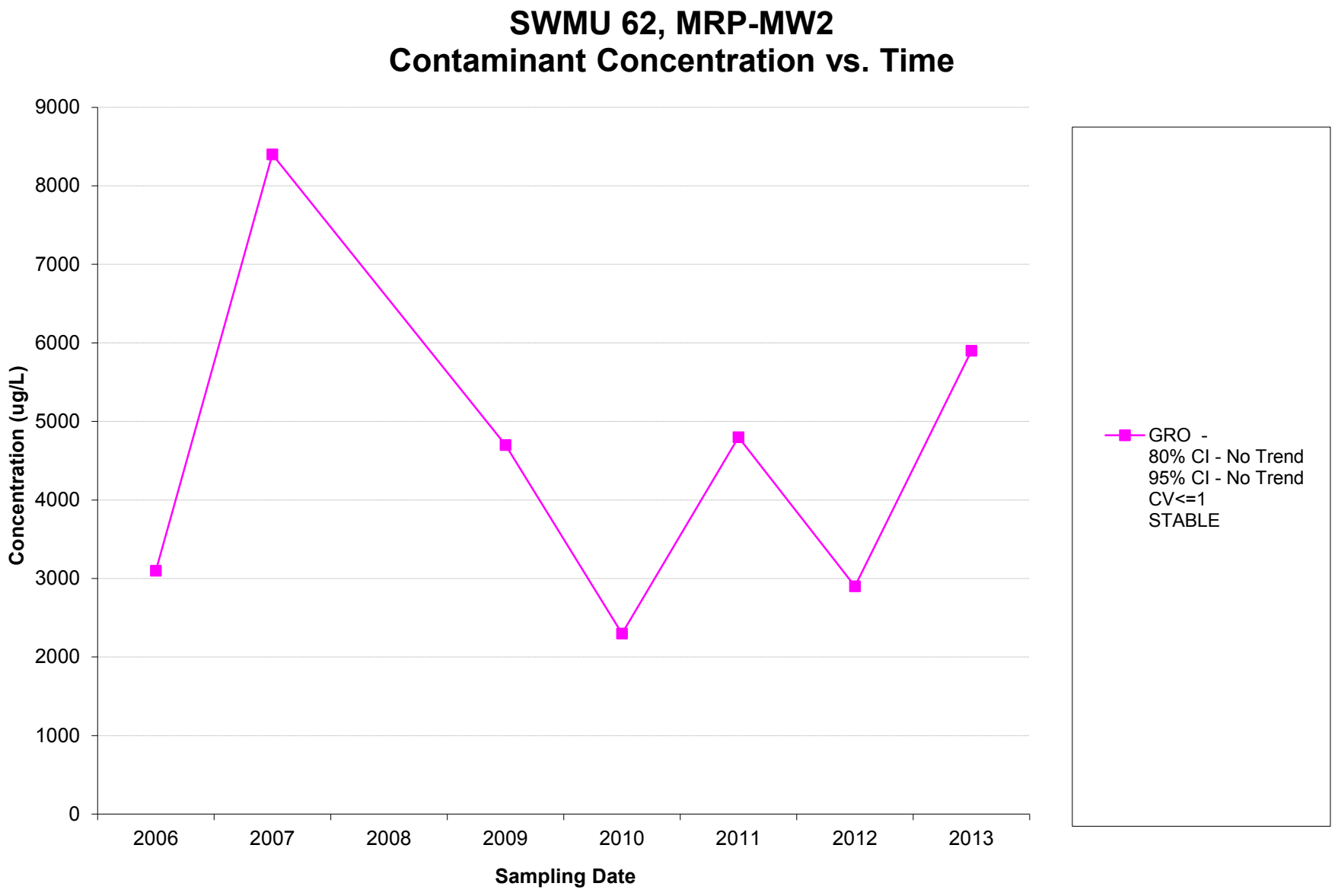
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	MRP-MW2

	Compound ->	Benzene	GRO				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**39**	**3,100**				
2	10/01/07	**67**	**8,400**				
3	10/01/09	**75**	**4,700**				
4	10/01/10	**43**	**2,300**				
5	10/01/11	**29**	**4,800**				
6	10/01/12	**35**	**2,900**				
7	10/01/13	**94**	**5,900**				
8							
9							
10							

Mann Kendall Statistic (S) =	1	1	0	0	0	0
Number of Rounds (n) =	7	7	0	0	0	0
Average =	54.57	4585.71	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	24.289	2105.887	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.445	0.459	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected			**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**	**No Trend**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**No Trend**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1 STABLE**	**CV<=1 STABLE**	**n<4 n<4**	**n<4 n<4**	**n<4 n<4**	**n<4 n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, MRP-MW2
Contamination Concentration vs. Time
Concentration (ug/L)
100
90
80
70
60
50
40
30
20
10
0
2006
2007
2008
2009
2010
2011
2012
2013
Sample Date
Benzene -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE


SWMU 62, MRP-MW2
Contaminant Concentration vs. Time
Concentration (ug/L)
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

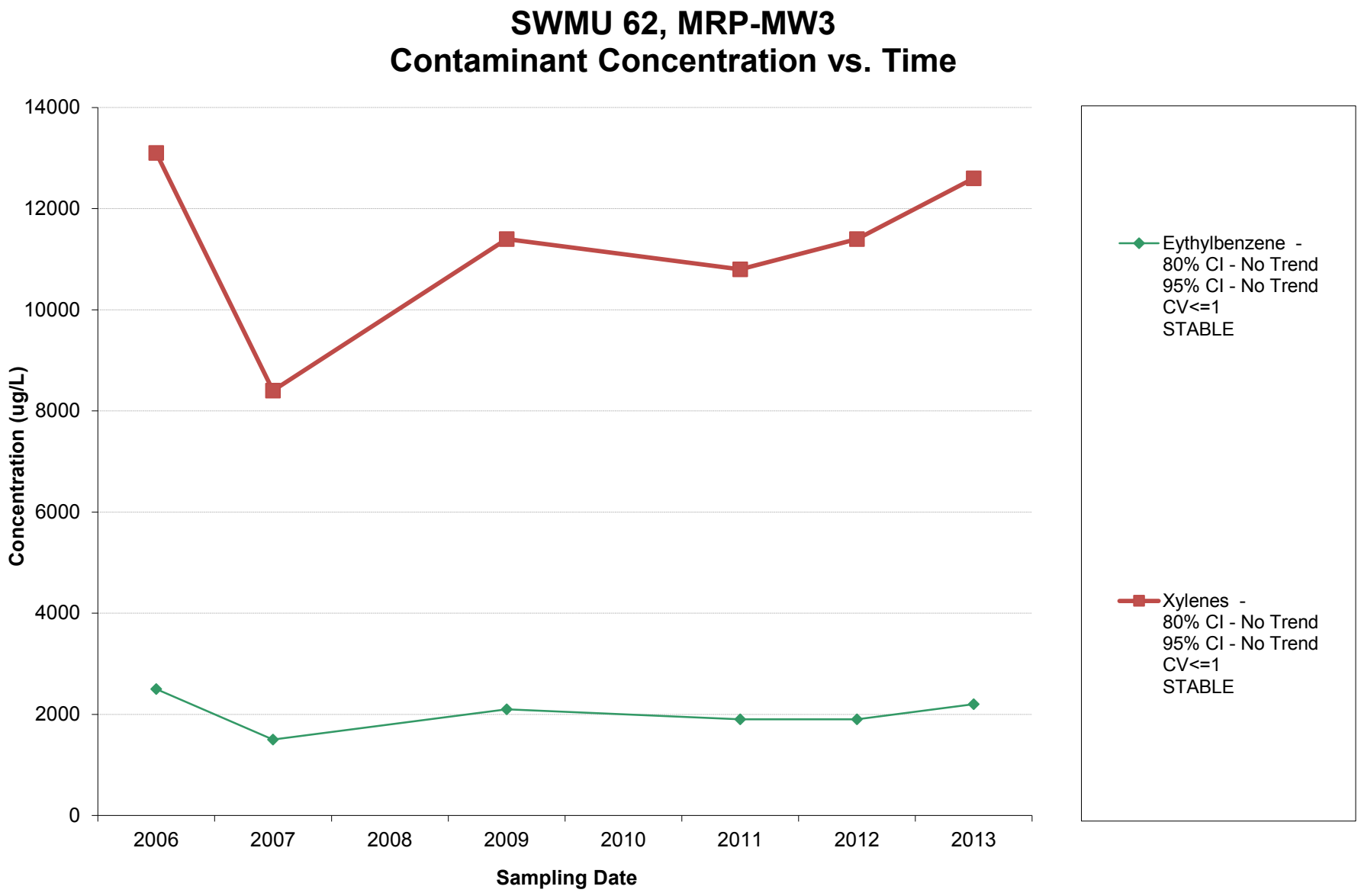
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	MRP-MW3

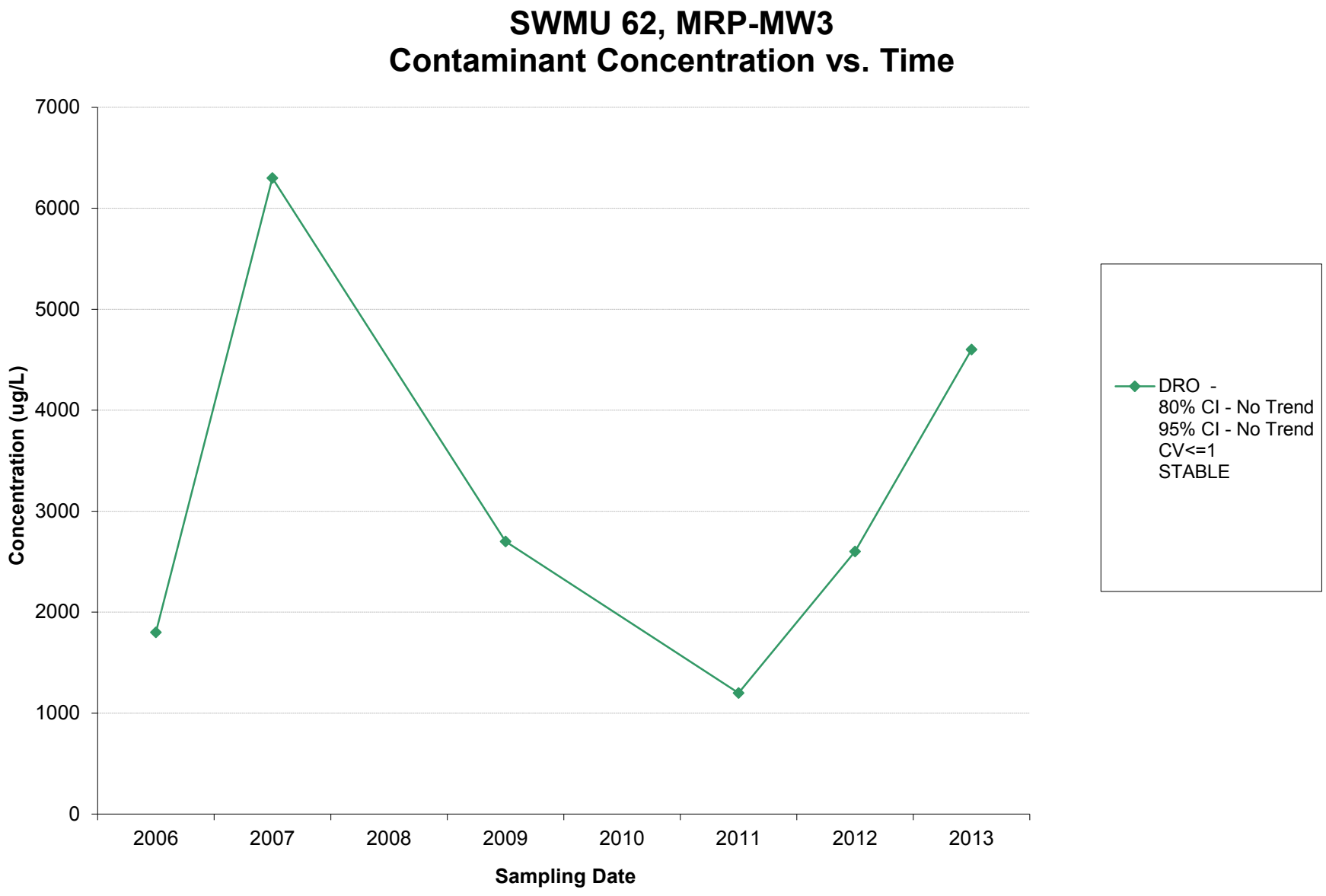
	Compound ->	GRO	Eythylbenzene	Xylenes	DRO		
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**38,000**	**2,500**	**13,100**	**1,800**		
2	10/01/07	**38,000**	**1,500**	**8,400**	**6,300**		
3	10/01/09	**40,000**	**2,100**	**11,400**	**2,700**		
4	10/01/11	**34,000**	**1,900**	**10,800**	**1,200**		
5	10/01/12	**31,000**	**1,900**	**11,400**	**2,600**		
6	10/01/13	**60,000**	**2,200**	**12,600**	**4,600**		
7							
8							
9							
10							

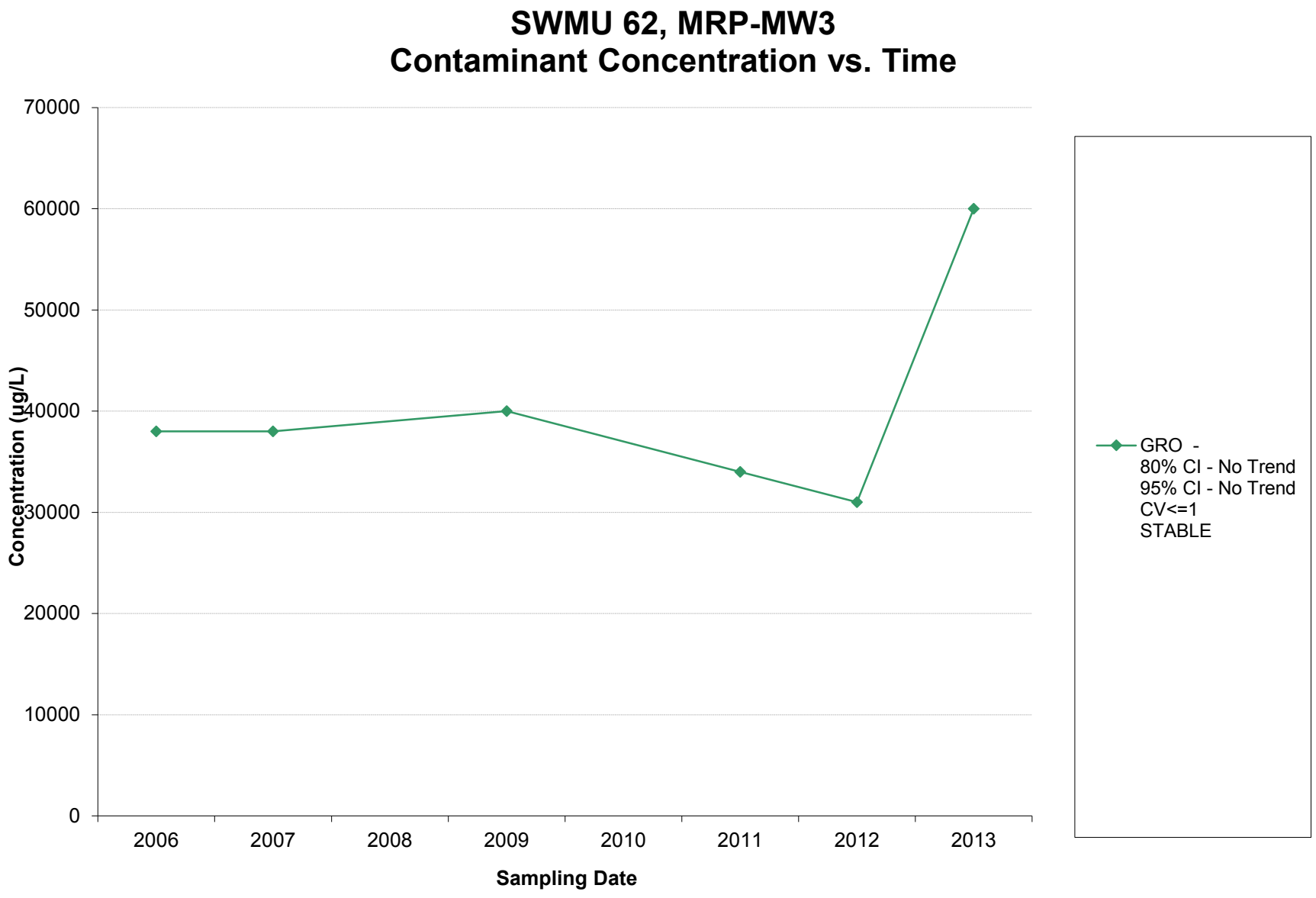
Mann Kendall Statistic (S) =	0	0	2	1	0	0
Number of Rounds (n) =	6	6	6	6	0	0
Average =	40166.67	2016.67	11283.33	3200.00	#DIV/0!	#DIV/0!
Standard Deviation =	10245.324	337.145	1649.747	1904.731	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.255	0.167	0.146	0.595	#DIV/0!	#DIV/0!

Error Check, Blank if No Errors Detected					**N<4**	**N<4**
Trend at **80% Confidence Level**	**No Trend**	**No Trend**	**No Trend**	**No Trend**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**No Trend**	**No Trend**	**No Trend**	**No Trend**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1 STABLE**	**CV<=1 STABLE**	**CV<=1 STABLE**	**CV<=1 STABLE**	**n<4 n<4**	**n<4 n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, MRP-MW3
Contaminant Concentration vs. Time
Concentration (ug/L)
14000
12000
10000
8000
6000
4000
2000
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
Eythylbenzene -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE
Xylenes -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE


SWMU 62, MRP-MW3
Contaminant Concentration vs. Time
Concentration (ug/L)
7000
6000
5000
4000
3000
2000
1000
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE


SWMU 62, MRP-MW3
Contaminant Concentration vs. Time
70000
60000
50000
40000
30000
20000
10000
0
Concentration (µg/L)
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
GRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

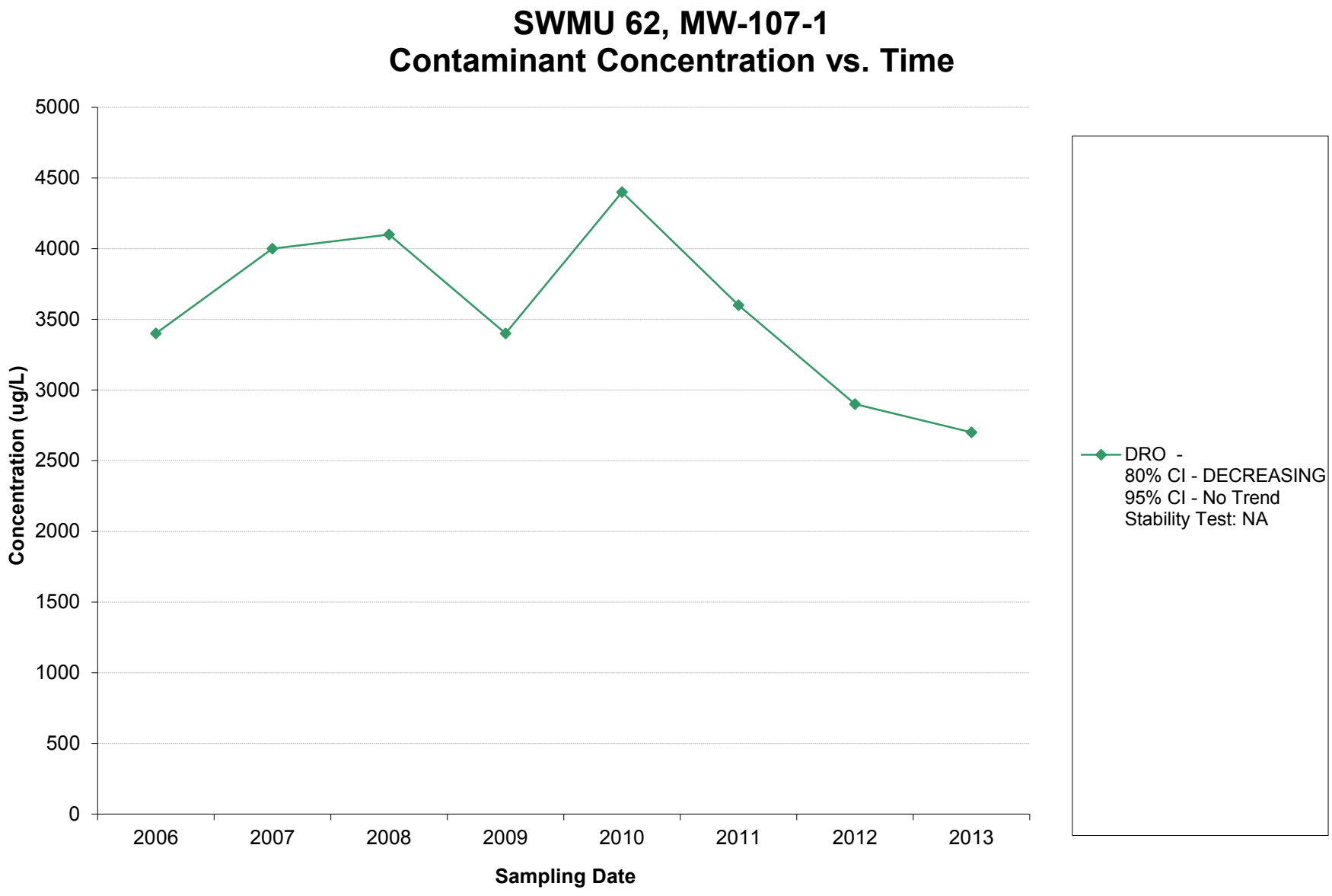
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	MW-107-1

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**3,400**					
2	10/01/07	**4,000**					
3	10/01/08	**4,100**					
4	10/01/09	**3,400**					
5	10/01/10	**4,400**					
6	10/01/11	**3,600**					
7	10/01/12	**2,900**					
8	10/01/13	**2,700**					
9							
10							

Mann Kendall Statistic (S) =	-9	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	3562.50	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	587.823	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.165	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at		n<4	n<4	n<4	n<4	n<4
80% Confidence Level	**NA**	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, MW-107-1
Contaminant Concentration vs. Time
Concentration (ug/L)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - DECREASING
95% CI - No Trend
Stability Test: NA

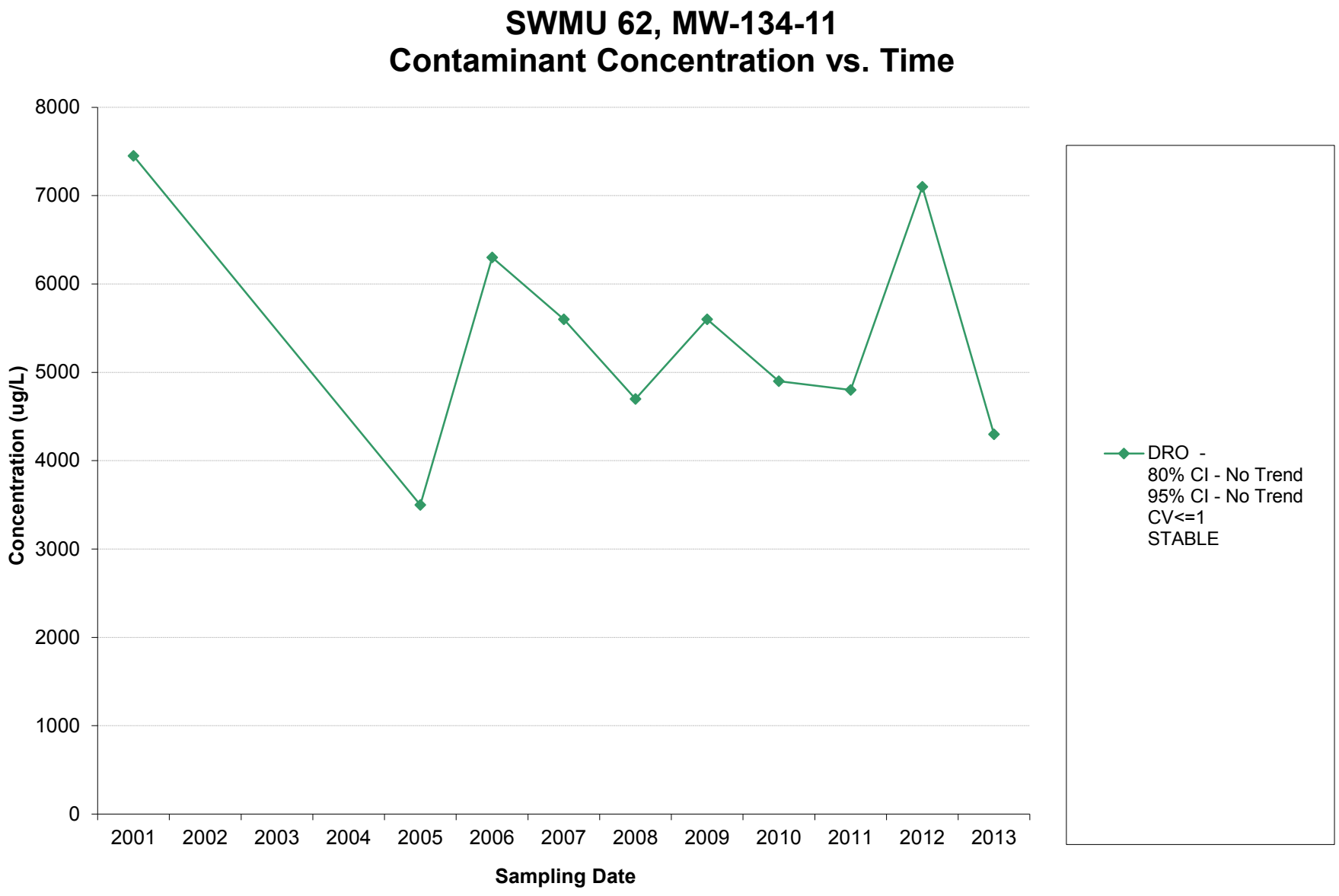
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	MW-134-11

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/01	**7,450**					
2	10/01/05	**3,500**					
3	10/01/06	**6,300**					
4	10/01/07	**5,600**					
5	10/01/08	**4,700**					
6	10/01/09	**5,600**					
7	10/01/10	**4,900**					
8	10/01/11	**4,800**					
9	10/01/12	**7,100**					
10	10/01/13	**4,300**					

Mann Kendall Statistic (S) =	-10	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	5425.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1242.589	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.229	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	**n<4**	**n<4**	**n<4**	**n<4**	**n<4**
	STABLE	**n<4**	**n<4**	**n<4**	**n<4**	**n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, MW-134-11
Contaminant Concentration vs. Time
Concentration (ug/L)
8000
7000
6000
5000
4000
3000
2000
1000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

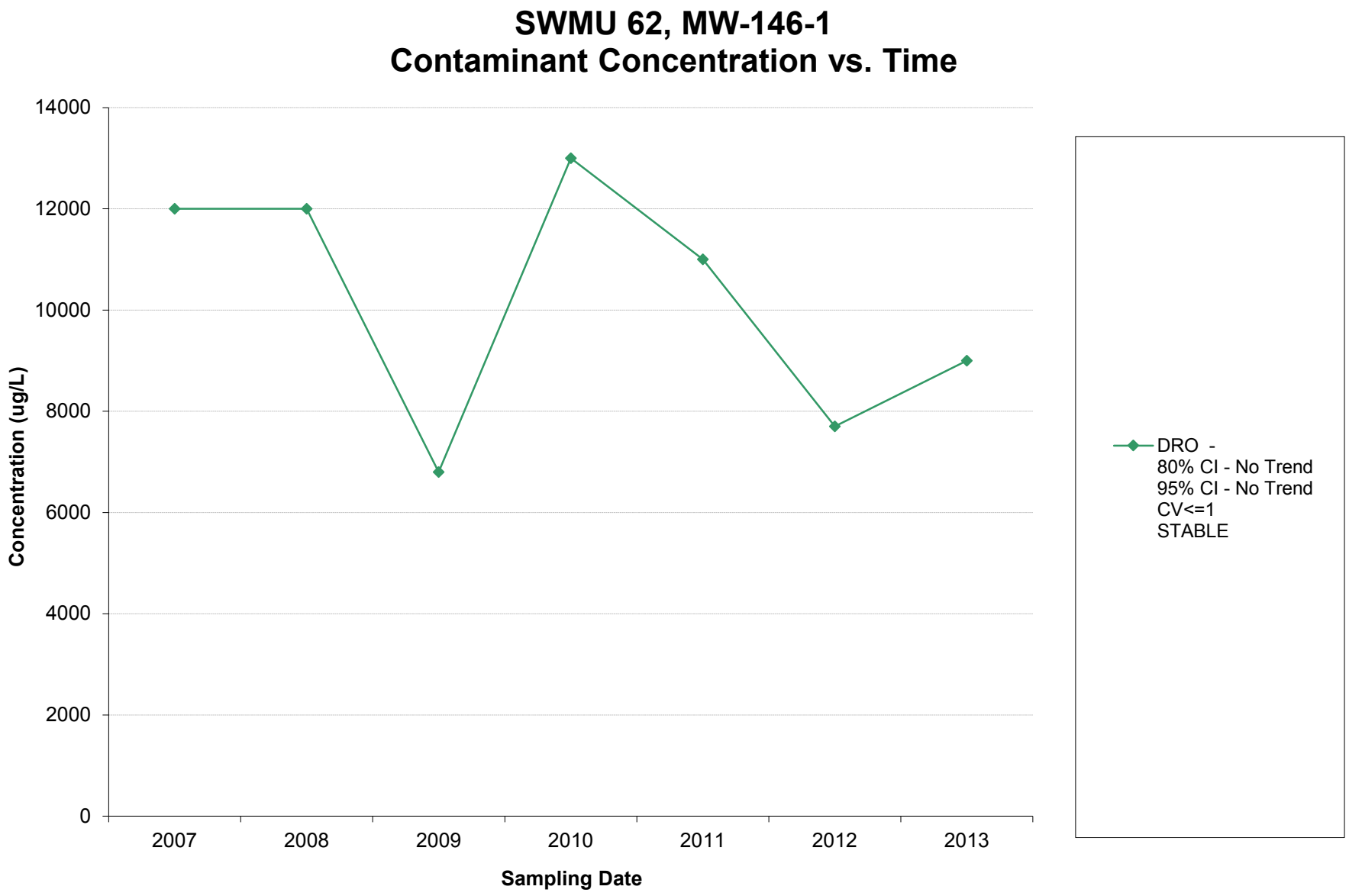
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	MW-146-1

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/07	**12,000**					
2	10/01/08	**12,000**					
3	10/01/09	**6,800**					
4	10/01/10	**13,000**					
5	10/01/11	**11,000**					
6	10/01/12	**7,700**					
7	10/01/13	**9,000**					
8							
9							
10							

Mann Kendall Statistic (S) =	-6	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	10214.29	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2387.766	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.234	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **80% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Trend at **95% Confidence Level**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	**n<4**	**n<4**	**n<4**	**n<4**	**n<4**
	STABLE	**n<4**	**n<4**	**n<4**	**n<4**	**n<4**

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, MW-146-1
Contaminant Concentration vs. Time
14000
12000
10000
8000
6000
4000
2000
0
Concentration (ug/L)
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

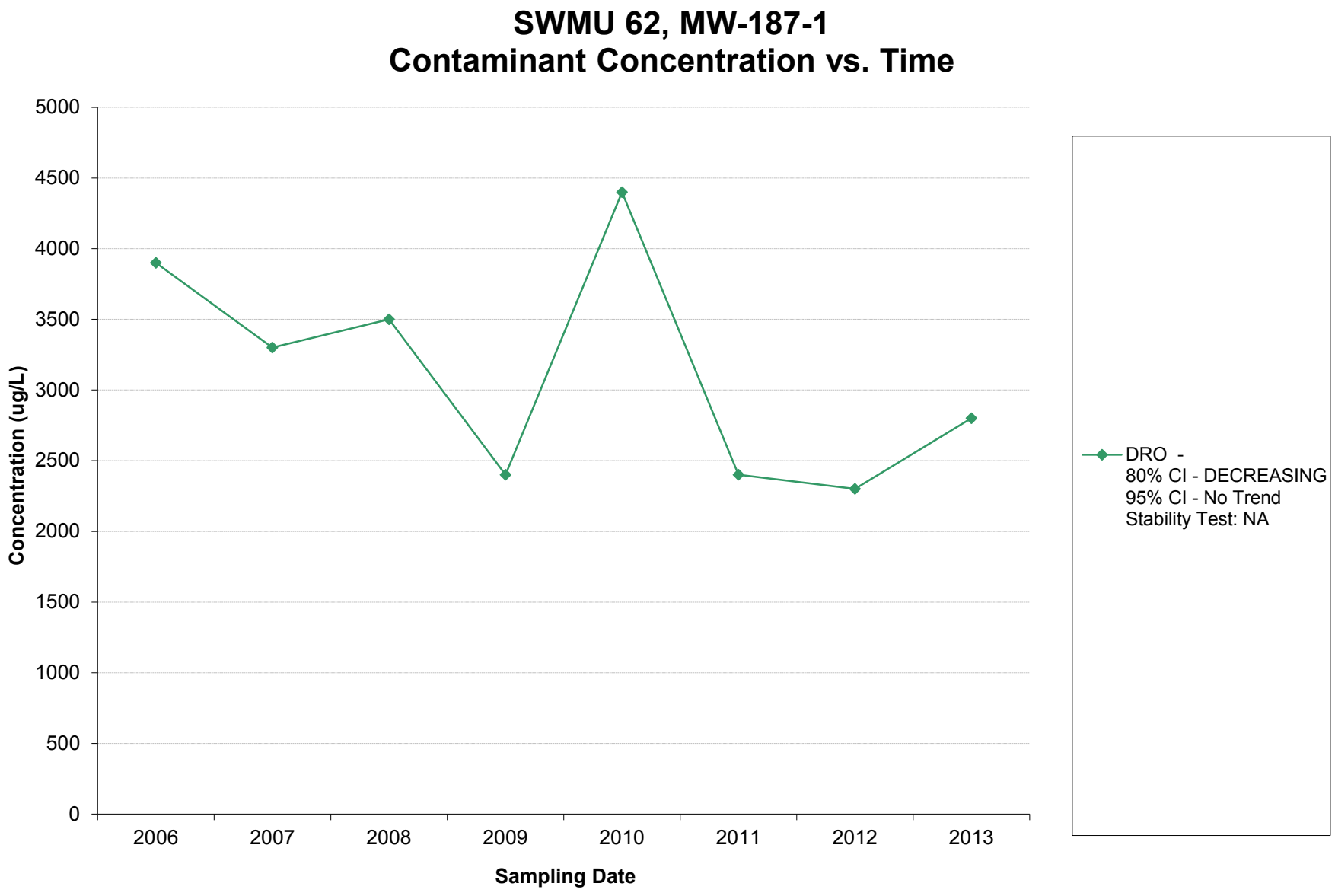
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	MW-187-1

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**3,900**					
2	10/01/07	**3,300**					
3	10/01/08	**3,500**					
4	10/01/09	**2,400**					
5	10/01/10	**4,400**					
6	10/01/11	**2,400**					
7	10/01/12	**2,300**					
8	10/01/13	**2,800**					
9							
10							

Mann Kendall Statistic (S) =	-11	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	3125.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	777.817	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.249	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at		n<4	n<4	n<4	n<4	n<4
80% Confidence Level	**NA**	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, MW-187-1
Contaminant Concentration vs. Time
Concentration (ug/L)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - DECREASING
95% CI - No Trend
Stability Test: NA

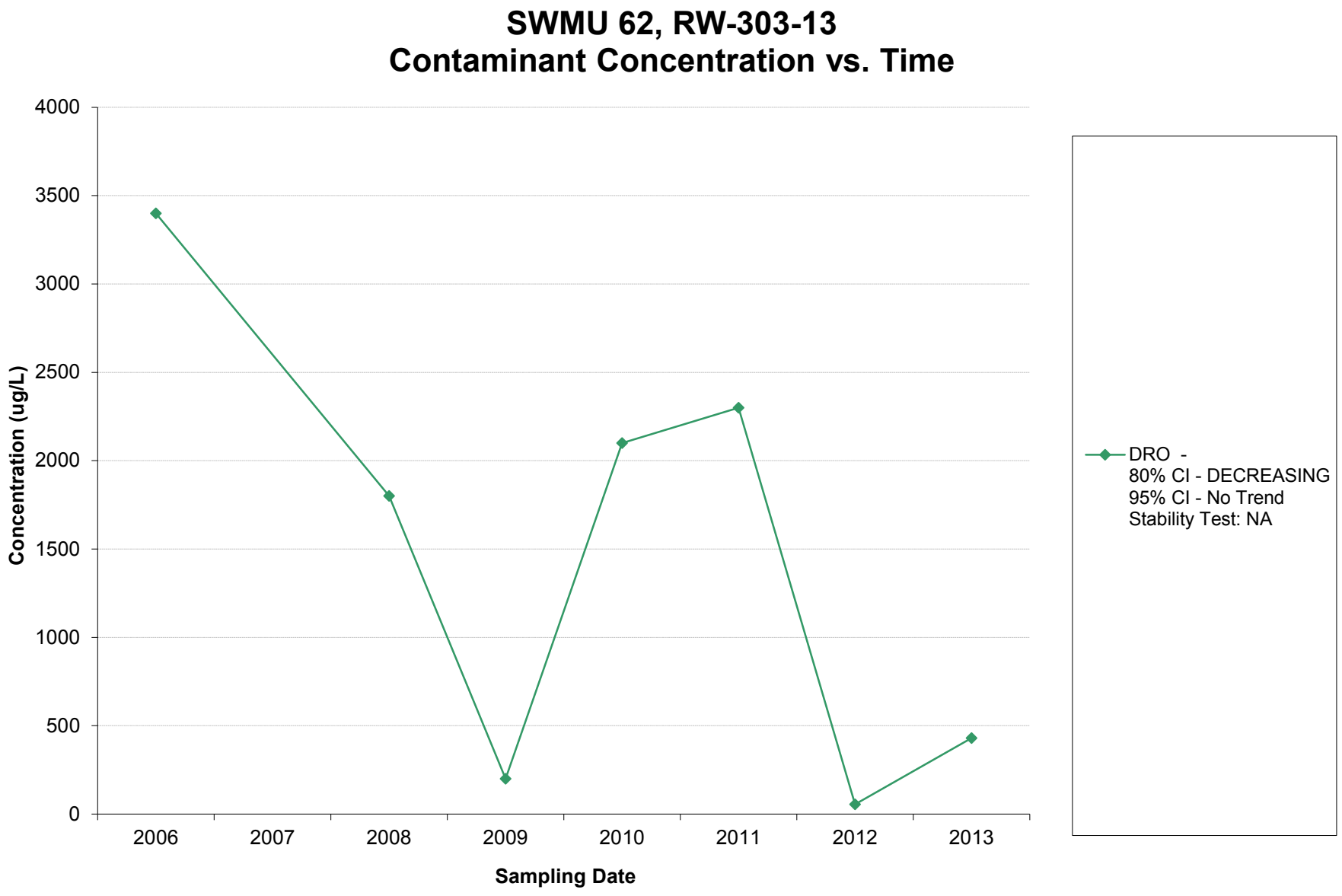
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	RW-303-13

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**3400**					
2	10/01/08	**1800**					
3	10/01/09	**200**					
4	10/01/10	**2100**					
5	10/01/11	**2300**					
6	10/01/12	**56**					
7	10/01/13	**430**					
8							
9							
10							

Mann Kendall Statistic (S) =	-7	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	1469.43	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1265.800	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.861	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**DECREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at		n<4	n<4	n<4	n<4	n<4
80% Confidence Level	**NA**	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	1/7/2014	Checked By =	RB


SWMU 62, RW-303-13
Contaminant Concentration vs. Time
Concentration (ug/L)
4000
3500
3000
2500
2000
1500
1000
500
0
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - DECREASING
95% CI - No Trend
Stability Test: NA

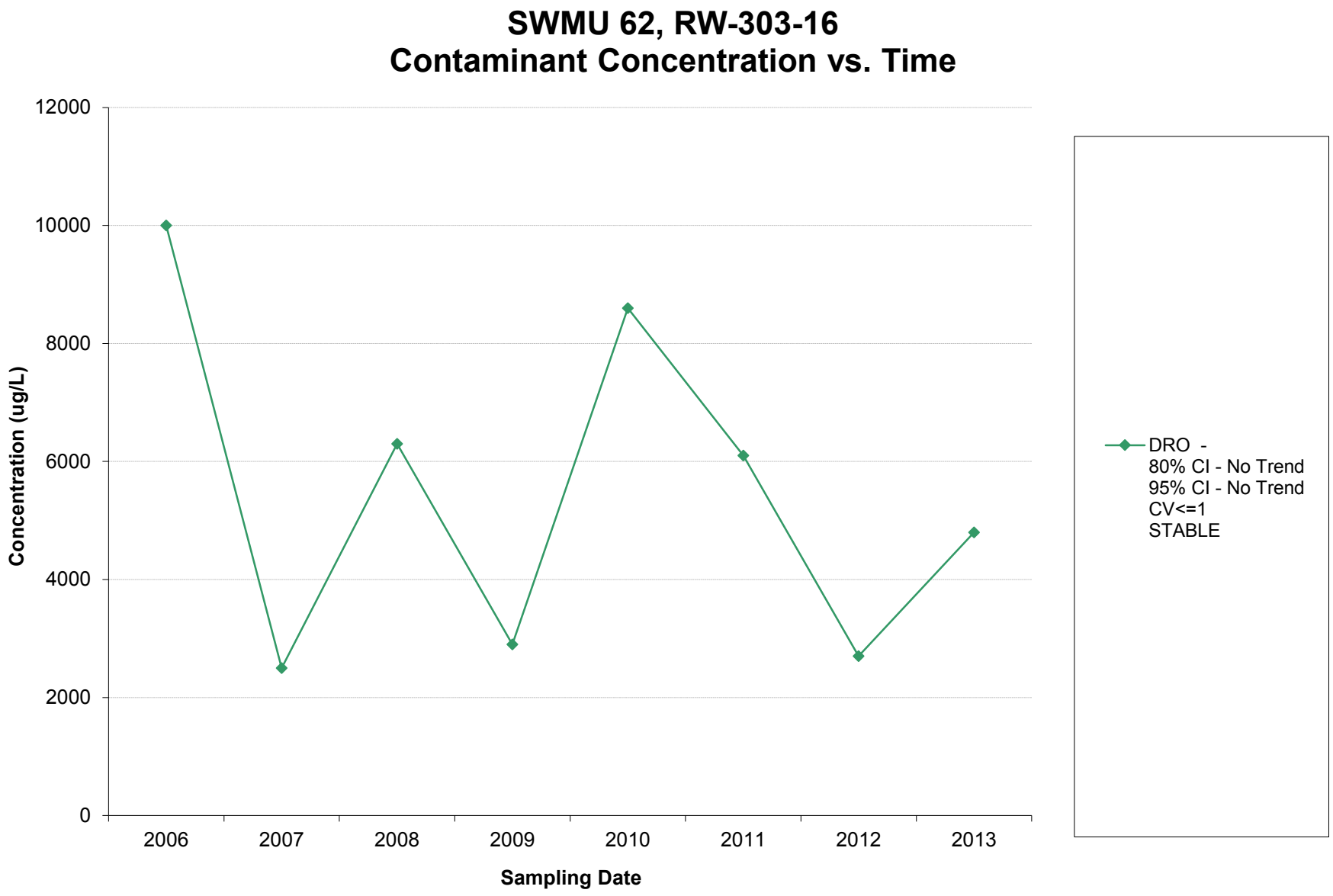
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	SWMU 62	Well Number =	RW-303-16

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**10,000**					
2	10/01/07	**2,500**					
3	10/01/08	**6,300**					
4	10/01/09	**2,900**					
5	10/01/10	**8,600**					
6	10/01/11	**6,100**					
7	10/01/12	**2,700**					
8	10/01/13	**4,800**					
9							
10							

Mann Kendall Statistic (S) =	-6	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	5487.50	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2801.753	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.511	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


SWMU 62, RW-303-16
Contaminant Concentration vs. Time
12000
10000
8000
6000
4000
2000
0
Concentration (ug/L)
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

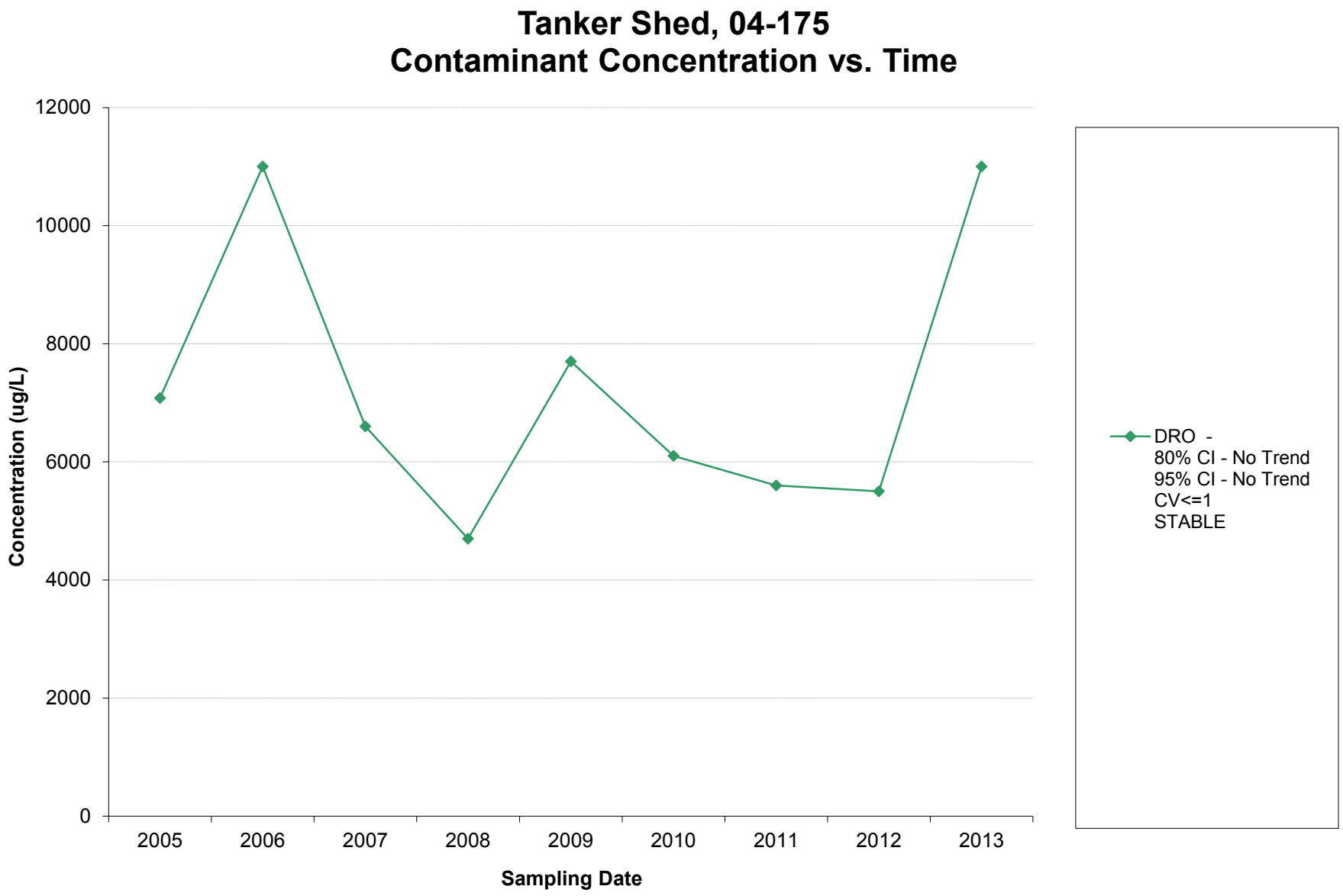
Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	TANKER SHED	Well Number =	04-175

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/05	**7,080**					
2	10/01/06	**11,000**					
3	10/01/07	**6,600**					
4	10/01/08	**4,700**					
5	10/01/09	**7,700**					
6	10/01/10	**6,100**					
7	10/01/11	**5,600**					
8	10/01/12	**5,500**					
9	10/01/13	**11,000**					
10							

Mann Kendall Statistic (S) =	-7	0	0	0	0	0
Number of Rounds (n) =	9	0	0	0	0	0
Average =	7253.33	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2301.869	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.317	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP

TETRA TECH EC, INC.


Tanker Shed, 04-175
Contaminant Concentration vs. Time
12000
10000
8000
6000
4000
2000
0
Concentration (ug/L)
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

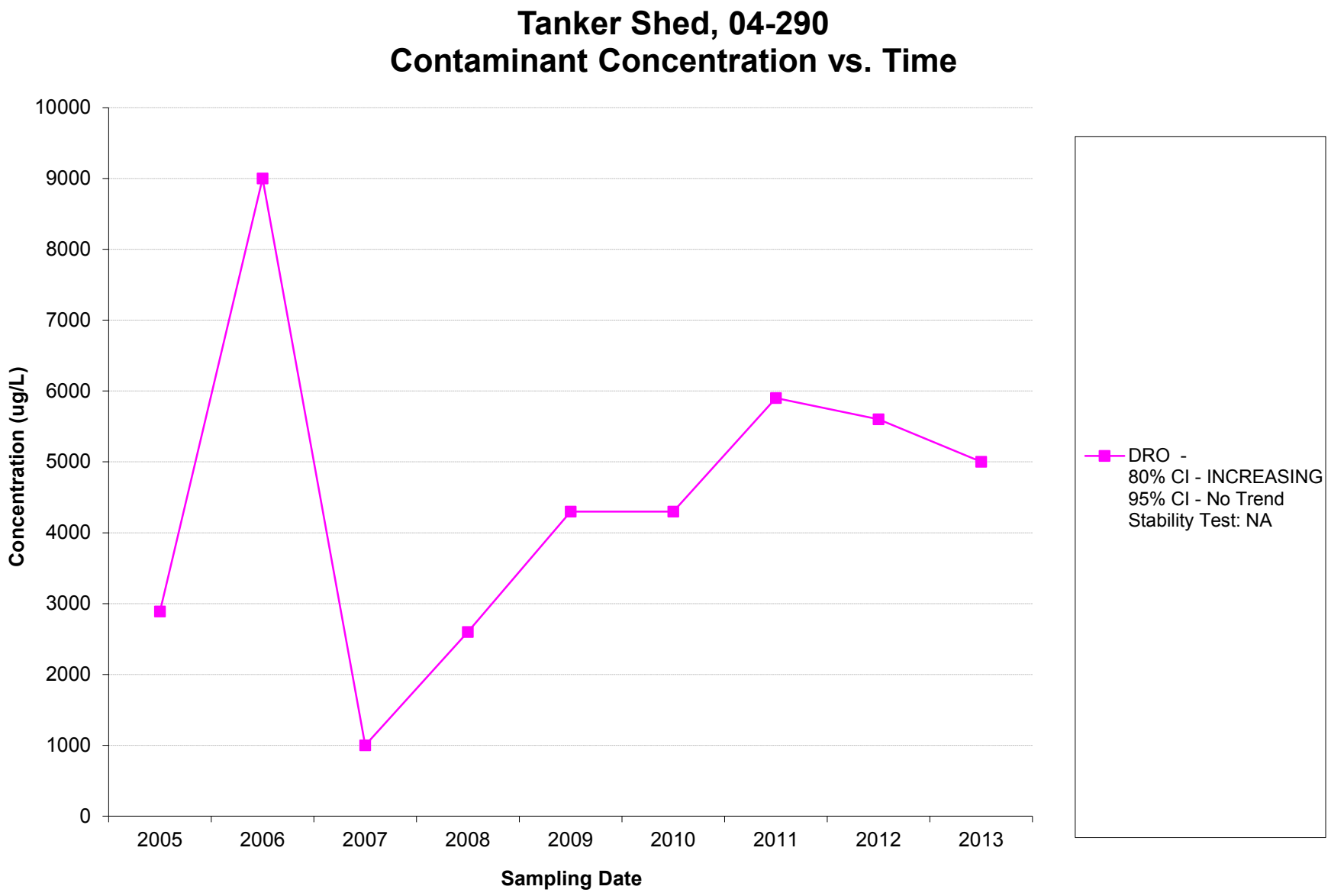
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	Tanker Shed	Well Number =	04-290

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/05	**2,890**					
2	10/01/06	**9,000**					
3	10/01/07	**1,000**					
4	10/01/08	**2,600**					
5	10/01/09	**4,300**					
6	10/01/10	**4,300**					
7	10/01/11	**5,900**					
8	10/01/12	**5,600**					
9	10/01/13	**5,000**					
10							

Mann Kendall Statistic (S) =	11	0	0	0	0	0
Number of Rounds (n) =	9	0	0	0	0	0
Average =	4510.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2296.769	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.509	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**INCREASING**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4	n<4 n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


Tanker Shed, 04-290
Contaminant Concentration vs. Time
Concentration (ug/L)
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - INCREASING
95% CI - No Trend
Stability Test: NA

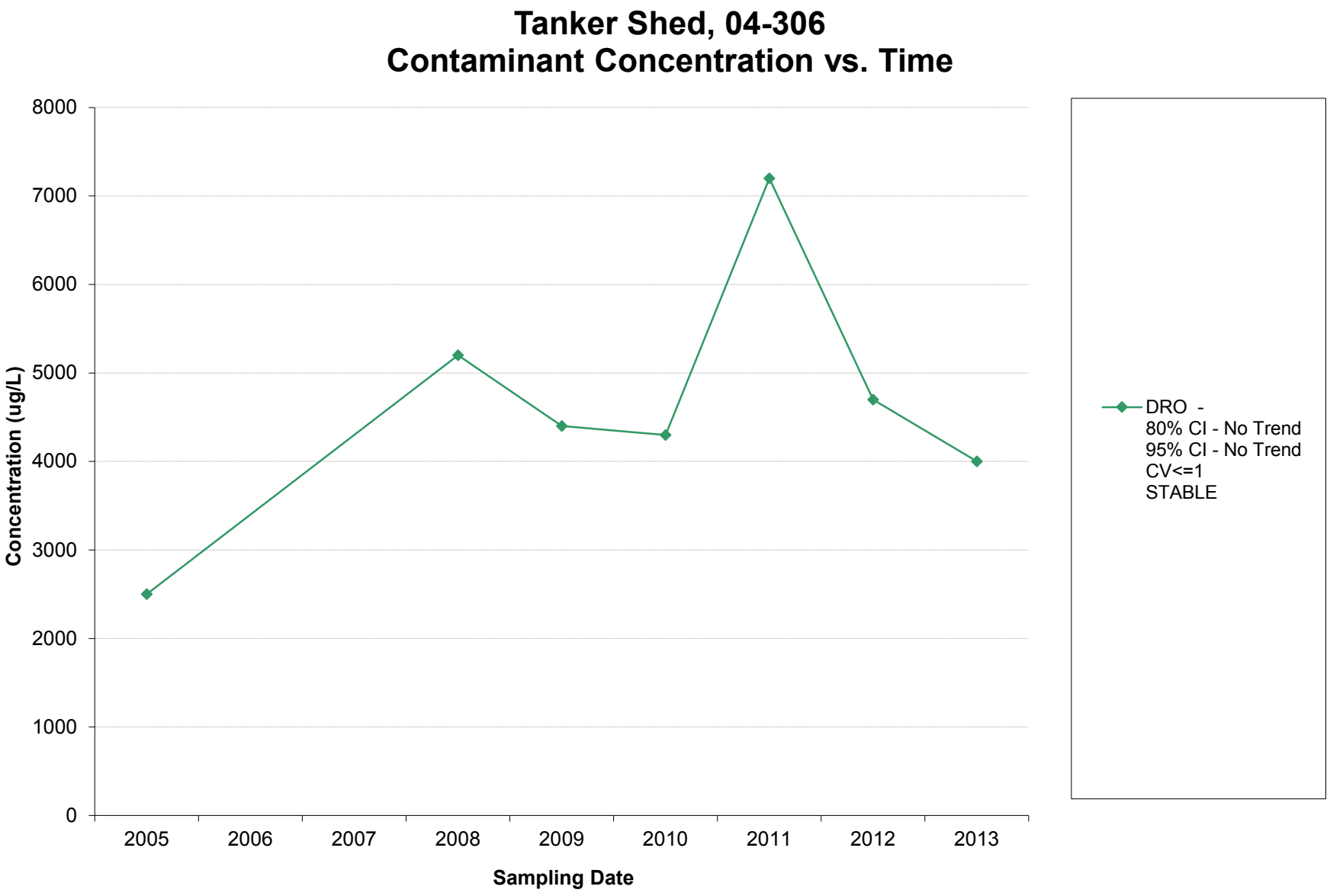
Mann-Kendall Statistical Test

Site Name =	2013 Adak Long Term Monitoring TO 66	Site ID No. =	Tanker Shed	Well Number =	04-306

	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/05	**2,500**					
2	10/01/08	**5,200**					
3	10/01/09	**4,400**					
4	10/01/10	**4,300**					
5	10/01/11	**7,200**					
6	10/01/12	**4,700**					
7	10/01/13	**4,000**					
8							
9							
10							

Mann Kendall Statistic (S) =	1	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	4614.29	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1415.896	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.307	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected		N<4	N<4	N<4	N<4	N<4
Trend at **80% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Trend at **95% Confidence Level**	**No Trend**	N<4	N<4	N<4	N<4	N<4
Stability Test, If No Trend Exists at 80% Confidence Level	**CV<=1**	n<4	n<4	n<4	n<4	n<4
	STABLE	n<4	n<4	n<4	n<4	n<4

Data Entry By =	CA	Date =	12/10/2013	Checked By =	VSP


Tanker Shed, 04-306
Contaminant Concentration vs. Time
Concentration (ug/L)
8000
7000
6000
5000
4000
3000
2000
1000
0
2005
2006
2007
2008
2009
2010
2011
2012
2013
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Concentrations (ppb)

Parameter: Benzene

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Measurements: 38
Total Non-Detect: 1
Percent Non-Detects: 2.63158%
Total Background Measurements: 0
There are 0 background locations

Loc.	Meas.	ND	Date	Conc.	Original

There are 3 compliance locations

Loc.	Meas.	ND	Date	Conc.	Original
08-202	13	0 (0%)	10/1/2000	22	22
			10/1/2001	17.8	17.8
			10/1/2002	18	18
			10/1/2003	24	24
			10/1/2004	16	16
			10/1/2005	14.6	14.6
			10/1/2006	13 J	13 J
			10/1/2007	14	14
			10/1/2008	16	16
			10/1/2009	12	12
			10/1/2010	12	12
			10/1/2012	9.6	9.6
			10/1/2013	9.3	9.3
14-113	11	0 (0%)	10/1/2003	34	34
			10/1/2004	30.8 J	30.8 J
			10/1/2005	22.7 J	22.7 J
			10/1/2006	16	16
			10/1/2007	14	14
			10/1/2008	9.6 D	9.6 D
			10/1/2009	13 D	13 D
			10/1/2010	12	12
			10/1/2011	8.3	8.3
			10/1/2012	6.9 J	6.9 J
			10/1/2013	6.9	6.9
TFB-MW4B	14	1 (7.14286%)	10/1/2000	ND<10 U	ND<20 U
			10/1/2001	54	54
			10/1/2002	50 J	50 J
			10/1/2003	73 J	73 J
			10/1/2004	69 J	69 J
			10/1/2005	49.5 J	49.5 J
			10/1/2006	31	31
			10/1/2007	39 D	39 D
			10/1/2008	29 D	29 D
			10/1/2009	31 D	31 D
			10/1/2010	30 D	30 D
			10/1/2011	23 D	23 D
			10/1/2012	24 D	24 D
			10/1/2013	20 D	20 D

There are 0 unused locations

Loc.	Meas.	ND	Date	Conc.	Original

Concentrations (ppb)

Parameter: cis12DCE

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Measurements: 13
Total Non-Detect: 0
Percent Non-Detects: 0%
Total Background Measurements: 0
There are 0 background locations

Loc.	Meas.	ND	Date	Conc.	Original

There is 1 compliance location

Loc.	Meas.	ND	Date	Conc.	Original
05-735	13	0 (0%)	10/1/2001	189	189
			10/1/2002	420	420
			10/1/2003	730	730
			10/1/2004	483 J	483 J
			10/1/2005	542 J	542 J
			10/1/2006	420	420
			10/1/2007	570 D	570 D
			10/1/2008	340 JD	340 JD
			10/1/2009	340 D	340 D
			10/1/2010	400 D	400 D
			10/1/2011	280 DJ	280 DJ
			10/1/2012	240 D	240 D
			10/1/2013	180 D	180 D

There are 0 unused locations

Loc.	Meas.	ND	Date	Conc.	Original

Concentrations (ppb)

Parameter: Dissolved Lead

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Measurements: 13
Total Non-Detect: 0
Percent Non-Detects: 0%
Total Background Measurements: 0
There are 0 background locations

Loc.	Meas.	ND	Date	Conc.	Original

There is 1 compliance location

Loc.	Meas.	ND	Date	Conc.	Original
MW14-5	13	0 (0%)	10/1/2000	32.6	32.6
			10/1/2001	29	29
			10/1/2002	21.7	21.7
			10/1/2003	84.6	84.6
			10/1/2004	25.3	25.3
			10/1/2005	20.8	20.8
			10/1/2006	15	15
			10/1/2007	36.8 J	36.8 J
			10/1/2008	23.8	23.8
			10/1/2009	17.5	17.5
			10/1/2010	13.8	13.8
			10/1/2011	17	17
			10/1/2012	27.9	27.9

There are 0 unused locations

Loc.	Meas.	ND	Date	Conc.	Original

Concentrations (ppb)

Parameter: DRO

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Measurements: 40
Total Non-Detect: 0
Percent Non-Detects: 0%
Total Background Measurements: 0
There are 0 background locations

Loc.	Meas.	ND	Date	Conc.	Original

There are 4 compliance locations

Loc.	Meas.	ND	Date	Conc.	Original
03-420	11	0 (0%)	10/1/2001	12300	12300
			10/1/2002	4900	4900
			10/1/2003	4900	4900
			10/1/2004	5454	5454
			10/1/2005	5650 J	5650 J
			10/1/2006	3800	3800
			10/1/2007	2400 Y	2400 Y
			10/1/2008	3300 Y	3300 Y
			10/1/2009	2200 Y	2200 Y
			10/1/2011	4300 Y	4300 Y
			10/1/2013	3300 Y	3300 Y
02-230	13	0 (0%)	10/1/2001	4230	4230
			10/1/2002	3500	3500
			10/1/2003	3900	3900
			10/1/2004	5760	5760
			10/1/2005	4060 J	4060 J
			10/1/2006	5500	5500
			10/1/2007	4800 Y	4800 Y
			10/1/2008	5000 Y	5000 Y
			10/1/2009	2400 Y	2400 Y
			10/1/2010	4000 Y	4000 Y
			10/1/2011	4200 Y	4200 Y
			10/1/2012	3200 Y	3200 Y
			10/1/2013	3500 Y	3500 Y
MW-107-1	8	0 (0%)	10/1/2006	3400	3400
			10/1/2007	4000 Y	4000 Y
			10/1/2008	4100 Y	4100 Y
			10/1/2009	3400 Y	3400 Y
			10/1/2010	4400 Y	4400 Y
			10/1/2011	3600 Y	3600 Y
			10/1/2012	2900 Y	2900 Y
			10/1/2013	2700 Y	2700 Y
MW-187-1	8	0 (0%)	10/1/2006	3900	3900
			10/1/2007	3300 Y	3300 Y
			10/1/2008	3500 Y	3500 Y
			10/1/2009	2400 Y	2400 Y
			10/1/2010	4400 Z	4400 Z
			10/1/2011	2400 Y	2400 Y

			10/1/2012	2300 Y	2300 Y
			10/1/2013	2800 Y	2800 Y

There are 0 unused locations

Loc.	Meas.	ND	Date	Conc.	Original

Concentrations (µg/L)

Parameter: DRO

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Measurements: 4
Total Non-Detect: 0
Percent Non-Detects: 0%
Total Background Measurements: 0
There are 0 background locations

Loc.	Meas.	ND	Date	Conc.	Original

There is 1 compliance location

Loc.	Meas.	ND	Date	Conc.	Original
03-890	4	0 (0%)	10/1/2009	44000 YJ	44000 YJ
			10/1/2010	10000 Y	10000 Y
			10/1/2011	13000 Y	13000 Y
			10/1/2013	11000 Y	11000 Y

There are 0 unused locations

Loc.	Meas.	ND	Date	Conc.	Original

Concentrations (ppb)

Parameter: DRO

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Measurements: 7
Total Non-Detect: 0
Percent Non-Detects: 0%
Total Background Measurements: 0
There are 0 background locations

Loc.	Meas.	ND	Date	Conc.	Original

There is 1 compliance location

Loc.	Meas.	ND	Date	Conc.	Original
RW-303-13	7	0 (0%)	10/1/2006	3400	3400
			10/1/2008	1800	1800
			10/1/2009	200	200
			10/1/2010	2100	2100
			10/1/2011	2300	2300
			10/1/2012	56	56
			10/1/2013	430	430

There are 0 unused locations

Loc.	Meas.	ND	Date	Conc.	Original

Concentrations (ppb)

Parameter: GRO

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Measurements: 64
Total Non-Detect: 0
Percent Non-Detects: 0%
Total Background Measurements: 0
There are 0 background locations

Loc.	Meas.	ND	Date	Conc.	Original

There are 6 compliance locations

Loc.	Meas.	ND	Date	Conc.	Original
04-100	11	0 (0%)	10/1/2003	1600	1600
			10/1/2004	5300 J	5300 J
			10/1/2005	4420 J	4420 J
			10/1/2006	5200 J	5200 J
			10/1/2007	4400 Y	4400 Y
			10/1/2008	4000 Z	4000 Z
			10/1/2009	4400 Z	4400 Z
			10/1/2010	3100 Y	3100 Y
			10/1/2011	2900 Y	2900 Y
			10/1/2012	3800 Y	3800 Y
			10/1/2013	2900 Y	2900 Y
04-213	8	0 (0%)	10/1/2006	3800 J	3800 J
			10/1/2007	5900 Y	5900 Y
			10/1/2008	6900 Z	6900 Z
			10/1/2009	4400 Z	4400 Z
			10/1/2010	3300 Y	3300 Y
			10/1/2011	4000 Y	4000 Y
			10/1/2012	3900 Y	3900 Y
			10/1/2013	3200 Y	3200 Y
MW14-5	13	0 (0%)	10/1/2001	15900	15900
			10/1/2002	12000	12000
			10/1/2003	13000	13000
			10/1/2004	16100 J	16100 J
			10/1/2005	12600 J	12600 J
			10/1/2006	9900	9900
			10/1/2007	14000 DY	14000 DY
			10/1/2008	11000 DY	11000 DY
			10/1/2009	15000 DY	15000 DY
			10/1/2010	9000 DY	9000 DY
			10/1/2011	11000 DY	11000 DY
			10/1/2012	7000 Y	7000 Y
			10/1/2013	4700 Y	4700 Y
14-113	11	0 (0%)	10/1/2003	2000	2000
			10/1/2004	6880 J	6880 J
			10/1/2005	3900 J	3900 J
			10/1/2006	6300	6300
			10/1/2007	3900 Z	3900 Z
			10/1/2008	2700 Z	2700 Z

			10/1/2009	5100 Z	5100 Z
			10/1/2010	3800 Y	3800 Y
			10/1/2011	3400 Y	3400 Y
			10/1/2012	2000 Y	2000 Y
			10/1/2013	2800 Z	2800 Z
14-210	13	0 (0%)	10/1/2001	5900	5900
			10/1/2002	2300	2300
			10/1/2003	3300	3300
			10/1/2004	5220 J	5220 J
			10/1/2005	3560	3560
			10/1/2006	3700 J	3700 J
			10/1/2007	3400 Y	3400 Y
			10/1/2008	3800 Y	3800 Y
			10/1/2009	4500 Y	4500 Y
			10/1/2010	4200 Y	4200 Y
			10/1/2011	1600 Y	1600 Y
			10/1/2012	2400 Y	2400 Y
			10/1/2013	3200 Z	3200 Z
03-502	8	0 (0%)	10/1/2006	8200	8200
			10/1/2007	6700 DY	6700 DY
			10/1/2008	5300 Y	5300 Y
			10/1/2009	3600 Y	3600 Y
			10/1/2010	1500 Y	1500 Y
			10/1/2011	3200 Y	3200 Y
			10/1/2012	3400 Y	3400 Y
			10/1/2013	3300 Y	3300 Y

There are 0 unused locations

Loc.	Meas.	ND	Date	Conc.	Original

Concentrations (ppb)

Parameter: GRO

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Measurements: 16
Total Non-Detect: 0
Percent Non-Detects: 0%
Total Background Measurements: 0
There are 0 background locations

Loc.	Meas.	ND	Date	Conc.	Original

There are 2 compliance locations

Loc.	Meas.	ND	Date	Conc.	Original
02-461	8	0 (0%)	10/1/2006	9900	9900
			10/1/2007	14000	14000
			10/1/2008	8600	8600
			10/1/2009	10000	10000
			10/1/2010	9500	9500
			10/1/2011	14000	14000
			10/1/2012	7800	7800
			10/1/2013	7000	7000
E-201	8	0 (0%)	10/1/2006	14000	14000
			10/1/2007	13000	13000
			10/1/2008	9400	9400
			10/1/2009	11000	11000
			10/1/2010	13000	13000
			10/1/2011	17000	17000
			10/1/2012	9900	9900
			10/1/2013	7900	7900

There are 0 unused locations

Loc.	Meas.	ND	Date	Conc.	Original

Concentrations (ppb)

Parameter: PCE

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Measurements: 12
Total Non-Detect: 0
Percent Non-Detects: 0%
Total Background Measurements: 0
There are 0 background locations

Loc.	Meas.	ND	Date	Conc.	Original

There is 1 compliance location

Loc.	Meas.	ND	Date	Conc.	Original
55-145	12	0 (0%)	10/1/2001	180	180
			10/1/2002	130	130
			10/1/2003	170	170
			10/1/2004	112	112
			10/1/2005	90.3	90.3
			10/1/2006	110	110
			10/1/2007	71	71
			10/1/2008	61	61
			10/1/2009	57	57
			10/1/2010	49	49
			10/1/2011	39	39
			10/1/2013	38	38

There are 0 unused locations

Loc.	Meas.	ND	Date	Conc.	Original

Concentrations (ppb)

Parameter: VinylChloride

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Measurements: 13
Total Non-Detect: 0
Percent Non-Detects: 0%
Total Background Measurements: 0
There are 0 background locations

Loc.	Meas.	ND	Date	Conc.	Original

There is 1 compliance location

Loc.	Meas.	ND	Date	Conc.	Original
05-735	13	0 (0%)	10/1/2001	4.18	4.18
			10/1/2002	5.6 J	5.6 J
			10/1/2003	7	7
			10/1/2004	6.7 J	6.7 J
			10/1/2005	7.2 J	7.2 J
			10/1/2006	7.4	7.4
			10/1/2007	3.4 D	3.4 D
			10/1/2008	6.1	6.1
			10/1/2009	5.4	5.4
			10/1/2010	4.3	4.3
			10/1/2011	2.8	2.8
			10/1/2012	2.7	2.7
			10/1/2013	3.2	3.2

There are 0 unused locations

Loc.	Meas.	ND	Date	Conc.	Original

Sen's Slope Analysis
Parameter: Benzene
Location: 14-113
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
30.8 J (10/1/2004)	34 (10/1/2003)	(30.8 - 34)/(2 - 1)	-3.2
22.7 J (10/1/2005)	34 (10/1/2003)	(22.7 - 34)/(3 - 1)	-5.65
16 (10/1/2006)	34 (10/1/2003)	(16 - 34)/(4 - 1)	-6
14 (10/1/2007)	34 (10/1/2003)	(14 - 34)/(5 - 1)	-5
9.6 D (10/1/2008)	34 (10/1/2003)	(9.6 - 34)/(6 - 1)	-4.88
13 D (10/1/2009)	34 (10/1/2003)	(13 - 34)/(7 - 1)	-3.5
12 (10/1/2010)	34 (10/1/2003)	(12 - 34)/(8 - 1)	-3.14286
8.3 (10/1/2011)	34 (10/1/2003)	(8.3 - 34)/(9 - 1)	-3.2125
6.9 J (10/1/2012)	34 (10/1/2003)	(6.9 - 34)/(10 - 1)	-3.01111
6.9 (10/1/2013)	34 (10/1/2003)	(6.9 - 34)/(11 - 1)	-2.71
22.7 J (10/1/2005)	30.8 J (10/1/2004)	(22.7 - 30.8)/(3 - 2)	-8.1
16 (10/1/2006)	30.8 J (10/1/2004)	(16 - 30.8)/(4 - 2)	-7.4
14 (10/1/2007)	30.8 J (10/1/2004)	(14 - 30.8)/(5 - 2)	-5.6
9.6 D (10/1/2008)	30.8 J (10/1/2004)	(9.6 - 30.8)/(6 - 2)	-5.3
13 D (10/1/2009)	30.8 J (10/1/2004)	(13 - 30.8)/(7 - 2)	-3.56
12 (10/1/2010)	30.8 J (10/1/2004)	(12 - 30.8)/(8 - 2)	-3.13333
8.3 (10/1/2011)	30.8 J (10/1/2004)	(8.3 - 30.8)/(9 - 2)	-3.21429
6.9 J (10/1/2012)	30.8 J (10/1/2004)	(6.9 - 30.8)/(10 - 2)	-2.9875
6.9 (10/1/2013)	30.8 J (10/1/2004)	(6.9 - 30.8)/(11 - 2)	-2.65556
16 (10/1/2006)	22.7 J (10/1/2005)	(16 - 22.7)/(4 - 3)	-6.7
14 (10/1/2007)	22.7 J (10/1/2005)	(14 - 22.7)/(5 - 3)	-4.35
9.6 D (10/1/2008)	22.7 J (10/1/2005)	(9.6 - 22.7)/(6 - 3)	-4.36667
13 D (10/1/2009)	22.7 J (10/1/2005)	(13 - 22.7)/(7 - 3)	-2.425
12 (10/1/2010)	22.7 J (10/1/2005)	(12 - 22.7)/(8 - 3)	-2.14
8.3 (10/1/2011)	22.7 J (10/1/2005)	(8.3 - 22.7)/(9 - 3)	-2.4
6.9 J (10/1/2012)	22.7 J (10/1/2005)	(6.9 - 22.7)/(10 - 3)	-2.25714
6.9 (10/1/2013)	22.7 J (10/1/2005)	(6.9 - 22.7)/(11 - 3)	-1.975
14 (10/1/2007)	16 (10/1/2006)	(14 - 16)/(5 - 4)	-2
9.6 D (10/1/2008)	16 (10/1/2006)	(9.6 - 16)/(6 - 4)	-3.2
13 D (10/1/2009)	16 (10/1/2006)	(13 - 16)/(7 - 4)	-1
12 (10/1/2010)	16 (10/1/2006)	(12 - 16)/(8 - 4)	-1
8.3 (10/1/2011)	16 (10/1/2006)	(8.3 - 16)/(9 - 4)	-1.54
6.9 J (10/1/2012)	16 (10/1/2006)	(6.9 - 16)/(10 - 4)	-1.51667
6.9 (10/1/2013)	16 (10/1/2006)	(6.9 - 16)/(11 - 4)	-1.3
9.6 D (10/1/2008)	14 (10/1/2007)	(9.6 - 14)/(6 - 5)	-4.4
13 D (10/1/2009)	14 (10/1/2007)	(13 - 14)/(7 - 5)	-0.5
12 (10/1/2010)	14 (10/1/2007)	(12 - 14)/(8 - 5)	-0.666667
8.3 (10/1/2011)	14 (10/1/2007)	(8.3 - 14)/(9 - 5)	-1.425
6.9 J (10/1/2012)	14 (10/1/2007)	(6.9 - 14)/(10 - 5)	-1.42
6.9 (10/1/2013)	14 (10/1/2007)	(6.9 - 14)/(11 - 5)	-1.18333
13 D (10/1/2009)	9.6 D (10/1/2008)	(13 - 9.6)/(7 - 6)	3.4
12 (10/1/2010)	9.6 D (10/1/2008)	(12 - 9.6)/(8 - 6)	1.2
8.3 (10/1/2011)	9.6 D (10/1/2008)	(8.3 - 9.6)/(9 - 6)	-0.433333

6.9 J (10/1/2012)	9.6 D (10/1/2008)	(6.9 - 9.6)/(10 - 6)	-0.675
6.9 (10/1/2013)	9.6 D (10/1/2008)	(6.9 - 9.6)/(11 - 6)	-0.54
12 (10/1/2010)	13 D (10/1/2009)	(12 - 13)/(8 - 7)	-1
8.3 (10/1/2011)	13 D (10/1/2009)	(8.3 - 13)/(9 - 7)	-2.35
6.9 J (10/1/2012)	13 D (10/1/2009)	(6.9 - 13)/(10 - 7)	-2.03333
6.9 (10/1/2013)	13 D (10/1/2009)	(6.9 - 13)/(11 - 7)	-1.525
8.3 (10/1/2011)	12 (10/1/2010)	(8.3 - 12)/(9 - 8)	-3.7
6.9 J (10/1/2012)	12 (10/1/2010)	(6.9 - 12)/(10 - 8)	-2.55
6.9 (10/1/2013)	12 (10/1/2010)	(6.9 - 12)/(11 - 8)	-1.7
6.9 J (10/1/2012)	8.3 (10/1/2011)	(6.9 - 8.3)/(10 - 9)	-1.4
6.9 (10/1/2013)	8.3 (10/1/2011)	(6.9 - 8.3)/(11 - 9)	-0.7
6.9 (10/1/2013)	6.9 J (10/1/2012)	(6.9 - 6.9)/(11 - 10)	0

Number of Q values = 55

Ordered Q Values

n	Q
1	-8.1
2	-7.4
3	-6.7
4	-6
5	-5.65
6	-5.6
7	-5.3
8	-5
9	-4.88
10	-4.4
11	-4.36667
12	-4.35
13	-3.7
14	-3.56
15	-3.5
16	-3.21429
17	-3.2125
18	-3.2
19	-3.2
20	-3.14286
21	-3.13333
22	-3.01111
23	-2.9875
24	-2.71
25	-2.65556
26	-2.55
27	-2.425
28	-2.4
29	-2.35
30	-2.25714
31	-2.14
32	-2.03333
33	-2
34	-1.975
35	-1.7

36	-1.54
37	-1.525
38	-1.51667
39	-1.425
40	-1.42
41	-1.4
42	-1.3
43	-1.18333
44	-1
45	-1
46	-1
47	-0.7
48	-0.675
49	-0.666667
50	-0.54
51	-0.5
52	-0.433333
53	0
54	1.2
55	3.4

Sen's Estimator (Median Q) is -2.4

Tied Group	Value	Members
1	6.9	2

Time Period	Observations
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 2970
b = 8910
c = 220
Group Variance = 164
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 16.4119
M1 = (55 - 16.4119)/2.0 = 19.2941
M2 = (55 + 16.4119)/2.0 + 1 = 36.7059
Lower limit is -3.2 = Q(19)
Upper limit is -1.525 = Q(37)
-1.525 < 0 indicating a downward trend in data.

Sen's Slope Analysis

Parameter: Benzene
Location: TFB-MW4B
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
54 (10/1/2001)	ND<10 U (10/1/2000)	(54 - 10)/(2 - 1)	44
50 J (10/1/2002)	ND<10 U (10/1/2000)	(50 - 10)/(3 - 1)	20
73 J (10/1/2003)	ND<10 U (10/1/2000)	(73 - 10)/(4 - 1)	21
69 J (10/1/2004)	ND<10 U (10/1/2000)	(69 - 10)/(5 - 1)	14.75
49.5 J (10/1/2005)	ND<10 U (10/1/2000)	(49.5 - 10)/(6 - 1)	7.9
31 (10/1/2006)	ND<10 U (10/1/2000)	(31 - 10)/(7 - 1)	3.5
39 D (10/1/2007)	ND<10 U (10/1/2000)	(39 - 10)/(8 - 1)	4.14286
29 D (10/1/2008)	ND<10 U (10/1/2000)	(29 - 10)/(9 - 1)	2.375
31 D (10/1/2009)	ND<10 U (10/1/2000)	(31 - 10)/(10 - 1)	2.33333
30 D (10/1/2010)	ND<10 U (10/1/2000)	(30 - 10)/(11 - 1)	2
23 D (10/1/2011)	ND<10 U (10/1/2000)	(23 - 10)/(12 - 1)	1.18182
24 D (10/1/2012)	ND<10 U (10/1/2000)	(24 - 10)/(13 - 1)	1.16667
20 D (10/1/2013)	ND<10 U (10/1/2000)	(20 - 10)/(14 - 1)	0.769231
50 J (10/1/2002)	54 (10/1/2001)	(50 - 54)/(3 - 2)	-4
73 J (10/1/2003)	54 (10/1/2001)	(73 - 54)/(4 - 2)	9.5
69 J (10/1/2004)	54 (10/1/2001)	(69 - 54)/(5 - 2)	5
49.5 J (10/1/2005)	54 (10/1/2001)	(49.5 - 54)/(6 - 2)	-1.125
31 (10/1/2006)	54 (10/1/2001)	(31 - 54)/(7 - 2)	-4.6
39 D (10/1/2007)	54 (10/1/2001)	(39 - 54)/(8 - 2)	-2.5
29 D (10/1/2008)	54 (10/1/2001)	(29 - 54)/(9 - 2)	-3.57143
31 D (10/1/2009)	54 (10/1/2001)	(31 - 54)/(10 - 2)	-2.875
30 D (10/1/2010)	54 (10/1/2001)	(30 - 54)/(11 - 2)	-2.66667
23 D (10/1/2011)	54 (10/1/2001)	(23 - 54)/(12 - 2)	-3.1
24 D (10/1/2012)	54 (10/1/2001)	(24 - 54)/(13 - 2)	-2.72727
20 D (10/1/2013)	54 (10/1/2001)	(20 - 54)/(14 - 2)	-2.83333
73 J (10/1/2003)	50 J (10/1/2002)	(73 - 50)/(4 - 3)	23
69 J (10/1/2004)	50 J (10/1/2002)	(69 - 50)/(5 - 3)	9.5
49.5 J (10/1/2005)	50 J (10/1/2002)	(49.5 - 50)/(6 - 3)	-0.166667
31 (10/1/2006)	50 J (10/1/2002)	(31 - 50)/(7 - 3)	-4.75
39 D (10/1/2007)	50 J (10/1/2002)	(39 - 50)/(8 - 3)	-2.2
29 D (10/1/2008)	50 J (10/1/2002)	(29 - 50)/(9 - 3)	-3.5
31 D (10/1/2009)	50 J (10/1/2002)	(31 - 50)/(10 - 3)	-2.71429
30 D (10/1/2010)	50 J (10/1/2002)	(30 - 50)/(11 - 3)	-2.5
23 D (10/1/2011)	50 J (10/1/2002)	(23 - 50)/(12 - 3)	-3
24 D (10/1/2012)	50 J (10/1/2002)	(24 - 50)/(13 - 3)	-2.6
20 D (10/1/2013)	50 J (10/1/2002)	(20 - 50)/(14 - 3)	-2.72727
69 J (10/1/2004)	73 J (10/1/2003)	(69 - 73)/(5 - 4)	-4
49.5 J (10/1/2005)	73 J (10/1/2003)	(49.5 - 73)/(6 - 4)	-11.75
31 (10/1/2006)	73 J (10/1/2003)	(31 - 73)/(7 - 4)	-14
39 D (10/1/2007)	73 J (10/1/2003)	(39 - 73)/(8 - 4)	-8.5
29 D (10/1/2008)	73 J (10/1/2003)	(29 - 73)/(9 - 4)	-8.8
31 D (10/1/2009)	73 J (10/1/2003)	(31 - 73)/(10 - 4)	-7
30 D (10/1/2010)	73 J (10/1/2003)	(30 - 73)/(11 - 4)	-6.14286
23 D (10/1/2011)	73 J (10/1/2003)	(23 - 73)/(12 - 4)	-6.25
24 D (10/1/2012)	73 J (10/1/2003)	(24 - 73)/(13 - 4)	-5.44444

20 D (10/1/2013)	73 J (10/1/2003)	(20 - 73)/(14 - 4)	-5.3
49.5 J (10/1/2005)	69 J (10/1/2004)	(49.5 - 69)/(6 - 5)	-19.5
31 (10/1/2006)	69 J (10/1/2004)	(31 - 69)/(7 - 5)	-19
39 D (10/1/2007)	69 J (10/1/2004)	(39 - 69)/(8 - 5)	-10
29 D (10/1/2008)	69 J (10/1/2004)	(29 - 69)/(9 - 5)	-10
31 D (10/1/2009)	69 J (10/1/2004)	(31 - 69)/(10 - 5)	-7.6
30 D (10/1/2010)	69 J (10/1/2004)	(30 - 69)/(11 - 5)	-6.5
23 D (10/1/2011)	69 J (10/1/2004)	(23 - 69)/(12 - 5)	-6.57143
24 D (10/1/2012)	69 J (10/1/2004)	(24 - 69)/(13 - 5)	-5.625
20 D (10/1/2013)	69 J (10/1/2004)	(20 - 69)/(14 - 5)	-5.44444
31 (10/1/2006)	49.5 J (10/1/2005)	(31 - 49.5)/(7 - 6)	-18.5
39 D (10/1/2007)	49.5 J (10/1/2005)	(39 - 49.5)/(8 - 6)	-5.25
29 D (10/1/2008)	49.5 J (10/1/2005)	(29 - 49.5)/(9 - 6)	-6.83333
31 D (10/1/2009)	49.5 J (10/1/2005)	(31 - 49.5)/(10 - 6)	-4.625
30 D (10/1/2010)	49.5 J (10/1/2005)	(30 - 49.5)/(11 - 6)	-3.9
23 D (10/1/2011)	49.5 J (10/1/2005)	(23 - 49.5)/(12 - 6)	-4.41667
24 D (10/1/2012)	49.5 J (10/1/2005)	(24 - 49.5)/(13 - 6)	-3.64286
20 D (10/1/2013)	49.5 J (10/1/2005)	(20 - 49.5)/(14 - 6)	-3.6875
39 D (10/1/2007)	31 (10/1/2006)	(39 - 31)/(8 - 7)	8
29 D (10/1/2008)	31 (10/1/2006)	(29 - 31)/(9 - 7)	-1
31 D (10/1/2009)	31 (10/1/2006)	(31 - 31)/(10 - 7)	0
30 D (10/1/2010)	31 (10/1/2006)	(30 - 31)/(11 - 7)	-0.25
23 D (10/1/2011)	31 (10/1/2006)	(23 - 31)/(12 - 7)	-1.6
24 D (10/1/2012)	31 (10/1/2006)	(24 - 31)/(13 - 7)	-1.16667
20 D (10/1/2013)	31 (10/1/2006)	(20 - 31)/(14 - 7)	-1.57143
29 D (10/1/2008)	39 D (10/1/2007)	(29 - 39)/(9 - 8)	-10
31 D (10/1/2009)	39 D (10/1/2007)	(31 - 39)/(10 - 8)	-4
30 D (10/1/2010)	39 D (10/1/2007)	(30 - 39)/(11 - 8)	-3
23 D (10/1/2011)	39 D (10/1/2007)	(23 - 39)/(12 - 8)	-4
24 D (10/1/2012)	39 D (10/1/2007)	(24 - 39)/(13 - 8)	-3
20 D (10/1/2013)	39 D (10/1/2007)	(20 - 39)/(14 - 8)	-3.16667
31 D (10/1/2009)	29 D (10/1/2008)	(31 - 29)/(10 - 9)	2
30 D (10/1/2010)	29 D (10/1/2008)	(30 - 29)/(11 - 9)	0.5
23 D (10/1/2011)	29 D (10/1/2008)	(23 - 29)/(12 - 9)	-2
24 D (10/1/2012)	29 D (10/1/2008)	(24 - 29)/(13 - 9)	-1.25
20 D (10/1/2013)	29 D (10/1/2008)	(20 - 29)/(14 - 9)	-1.8
30 D (10/1/2010)	31 D (10/1/2009)	(30 - 31)/(11 - 10)	-1
23 D (10/1/2011)	31 D (10/1/2009)	(23 - 31)/(12 - 10)	-4
24 D (10/1/2012)	31 D (10/1/2009)	(24 - 31)/(13 - 10)	-2.33333
20 D (10/1/2013)	31 D (10/1/2009)	(20 - 31)/(14 - 10)	-2.75
23 D (10/1/2011)	30 D (10/1/2010)	(23 - 30)/(12 - 11)	-7
24 D (10/1/2012)	30 D (10/1/2010)	(24 - 30)/(13 - 11)	-3
20 D (10/1/2013)	30 D (10/1/2010)	(20 - 30)/(14 - 11)	-3.33333
24 D (10/1/2012)	23 D (10/1/2011)	(24 - 23)/(13 - 12)	1
20 D (10/1/2013)	23 D (10/1/2011)	(20 - 23)/(14 - 12)	-1.5
20 D (10/1/2013)	24 D (10/1/2012)	(20 - 24)/(14 - 13)	-4

Number of Q values = 91

Ordered Q Values

n	Q
1	-19.5
2	-19
3	-18.5
4	-14
5	-11.75
6	-10
7	-10
8	-10
9	-8.8
10	-8.5
11	-7.6
12	-7
13	-7
14	-6.83333
15	-6.57143
16	-6.5
17	-6.25
18	-6.14286
19	-5.625
20	-5.44444
21	-5.44444
22	-5.3
23	-5.25
24	-4.75
25	-4.625
26	-4.6
27	-4.41667
28	-4
29	-4
30	-4
31	-4
32	-4
33	-4
34	-3.9
35	-3.6875
36	-3.64286
37	-3.57143
38	-3.5
39	-3.33333
40	-3.16667
41	-3.1
42	-3
43	-3
44	-3
45	-3
46	-2.875
47	-2.83333
48	-2.75
49	-2.72727
50	-2.72727
51	-2.71429
52	-2.66667
53	-2.6

54	-2.5
55	-2.5
56	-2.33333
57	-2.2
58	-2
59	-1.8
60	-1.6
61	-1.57143
62	-1.5
63	-1.25
64	-1.16667
65	-1.125
66	-1
67	-1
68	-0.25
69	-0.166667
70	0
71	0.5
72	0.769231
73	1
74	1.16667
75	1.18182
76	2
77	2
78	2.33333
79	2.375
80	3.5
81	4.14286
82	5
83	7.9
84	8
85	9.5
86	9.5
87	14.75
88	20
89	21
90	23
91	44

Sen's Estimator (Median Q) is -2.875

Tied Group	Value	Members
1	31	2

Time Period	Observations
10/1/2000	1
10/1/2001	1
10/1/2002	1
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1

10/1/2013 1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 6006
b = 19656
c = 364
Group Variance = 332.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 23.3744
M1 = (91 - 23.3744)/2.0 = 33.8128
M2 = (91 + 23.3744)/2.0 + 1 = 58.1872
Lower limit is -3.9 = Q(34)
Upper limit is -2 = Q(58)
-2 < 0 indicating a downward trend in data.

Sen's Slope Analysis

Parameter: Benzene
Location: 08-202
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
17.8 (10/1/2001)	22 (10/1/2000)	(17.8 - 22)/(2 - 1)	-4.2
18 (10/1/2002)	22 (10/1/2000)	(18 - 22)/(3 - 1)	-2
24 (10/1/2003)	22 (10/1/2000)	(24 - 22)/(4 - 1)	0.666667
16 (10/1/2004)	22 (10/1/2000)	(16 - 22)/(5 - 1)	-1.5
14.6 (10/1/2005)	22 (10/1/2000)	(14.6 - 22)/(6 - 1)	-1.48
13 J (10/1/2006)	22 (10/1/2000)	(13 - 22)/(7 - 1)	-1.5
14 (10/1/2007)	22 (10/1/2000)	(14 - 22)/(8 - 1)	-1.14286
16 (10/1/2008)	22 (10/1/2000)	(16 - 22)/(9 - 1)	-0.75
12 (10/1/2009)	22 (10/1/2000)	(12 - 22)/(10 - 1)	-1.11111
12 (10/1/2010)	22 (10/1/2000)	(12 - 22)/(11 - 1)	-1
9.6 (10/1/2012)	22 (10/1/2000)	(9.6 - 22)/(12 - 1)	-1.12727
9.3 (10/1/2013)	22 (10/1/2000)	(9.3 - 22)/(13 - 1)	-1.05833
18 (10/1/2002)	17.8 (10/1/2001)	(18 - 17.8)/(3 - 2)	0.2
24 (10/1/2003)	17.8 (10/1/2001)	(24 - 17.8)/(4 - 2)	3.1
16 (10/1/2004)	17.8 (10/1/2001)	(16 - 17.8)/(5 - 2)	-0.6
14.6 (10/1/2005)	17.8 (10/1/2001)	(14.6 - 17.8)/(6 - 2)	-0.8
13 J (10/1/2006)	17.8 (10/1/2001)	(13 - 17.8)/(7 - 2)	-0.96
14 (10/1/2007)	17.8 (10/1/2001)	(14 - 17.8)/(8 - 2)	-0.633333
16 (10/1/2008)	17.8 (10/1/2001)	(16 - 17.8)/(9 - 2)	-0.257143
12 (10/1/2009)	17.8 (10/1/2001)	(12 - 17.8)/(10 - 2)	-0.725
12 (10/1/2010)	17.8 (10/1/2001)	(12 - 17.8)/(11 - 2)	-0.644444
9.6 (10/1/2012)	17.8 (10/1/2001)	(9.6 - 17.8)/(12 - 2)	-0.82
9.3 (10/1/2013)	17.8 (10/1/2001)	(9.3 - 17.8)/(13 - 2)	-0.772727
24 (10/1/2003)	18 (10/1/2002)	(24 - 18)/(4 - 3)	6
16 (10/1/2004)	18 (10/1/2002)	(16 - 18)/(5 - 3)	-1
14.6 (10/1/2005)	18 (10/1/2002)	(14.6 - 18)/(6 - 3)	-1.13333
13 J (10/1/2006)	18 (10/1/2002)	(13 - 18)/(7 - 3)	-1.25
14 (10/1/2007)	18 (10/1/2002)	(14 - 18)/(8 - 3)	-0.8
16 (10/1/2008)	18 (10/1/2002)	(16 - 18)/(9 - 3)	-0.333333
12 (10/1/2009)	18 (10/1/2002)	(12 - 18)/(10 - 3)	-0.857143
12 (10/1/2010)	18 (10/1/2002)	(12 - 18)/(11 - 3)	-0.75
9.6 (10/1/2012)	18 (10/1/2002)	(9.6 - 18)/(12 - 3)	-0.933333
9.3 (10/1/2013)	18 (10/1/2002)	(9.3 - 18)/(13 - 3)	-0.87
16 (10/1/2004)	24 (10/1/2003)	(16 - 24)/(5 - 4)	-8
14.6 (10/1/2005)	24 (10/1/2003)	(14.6 - 24)/(6 - 4)	-4.7
13 J (10/1/2006)	24 (10/1/2003)	(13 - 24)/(7 - 4)	-3.66667
14 (10/1/2007)	24 (10/1/2003)	(14 - 24)/(8 - 4)	-2.5
16 (10/1/2008)	24 (10/1/2003)	(16 - 24)/(9 - 4)	-1.6
12 (10/1/2009)	24 (10/1/2003)	(12 - 24)/(10 - 4)	-2
12 (10/1/2010)	24 (10/1/2003)	(12 - 24)/(11 - 4)	-1.71429
9.6 (10/1/2012)	24 (10/1/2003)	(9.6 - 24)/(12 - 4)	-1.8
9.3 (10/1/2013)	24 (10/1/2003)	(9.3 - 24)/(13 - 4)	-1.63333
14.6 (10/1/2005)	16 (10/1/2004)	(14.6 - 16)/(6 - 5)	-1.4
13 J (10/1/2006)	16 (10/1/2004)	(13 - 16)/(7 - 5)	-1.5

14 (10/1/2007)	16 (10/1/2004)	(14 - 16)/(8 - 5)	-0.666667
16 (10/1/2008)	16 (10/1/2004)	(16 - 16)/(9 - 5)	0
12 (10/1/2009)	16 (10/1/2004)	(12 - 16)/(10 - 5)	-0.8
12 (10/1/2010)	16 (10/1/2004)	(12 - 16)/(11 - 5)	-0.666667
9.6 (10/1/2012)	16 (10/1/2004)	(9.6 - 16)/(12 - 5)	-0.914286
9.3 (10/1/2013)	16 (10/1/2004)	(9.3 - 16)/(13 - 5)	-0.8375
13 J (10/1/2006)	14.6 (10/1/2005)	(13 - 14.6)/(7 - 6)	-1.6
14 (10/1/2007)	14.6 (10/1/2005)	(14 - 14.6)/(8 - 6)	-0.3
16 (10/1/2008)	14.6 (10/1/2005)	(16 - 14.6)/(9 - 6)	0.466667
12 (10/1/2009)	14.6 (10/1/2005)	(12 - 14.6)/(10 - 6)	-0.65
12 (10/1/2010)	14.6 (10/1/2005)	(12 - 14.6)/(11 - 6)	-0.52
9.6 (10/1/2012)	14.6 (10/1/2005)	(9.6 - 14.6)/(12 - 6)	-0.833333
9.3 (10/1/2013)	14.6 (10/1/2005)	(9.3 - 14.6)/(13 - 6)	-0.757143
14 (10/1/2007)	13 J (10/1/2006)	(14 - 13)/(8 - 7)	1
16 (10/1/2008)	13 J (10/1/2006)	(16 - 13)/(9 - 7)	1.5
12 (10/1/2009)	13 J (10/1/2006)	(12 - 13)/(10 - 7)	-0.333333
12 (10/1/2010)	13 J (10/1/2006)	(12 - 13)/(11 - 7)	-0.25
9.6 (10/1/2012)	13 J (10/1/2006)	(9.6 - 13)/(12 - 7)	-0.68
9.3 (10/1/2013)	13 J (10/1/2006)	(9.3 - 13)/(13 - 7)	-0.616667
16 (10/1/2008)	14 (10/1/2007)	(16 - 14)/(9 - 8)	2
12 (10/1/2009)	14 (10/1/2007)	(12 - 14)/(10 - 8)	-1
12 (10/1/2010)	14 (10/1/2007)	(12 - 14)/(11 - 8)	-0.666667
9.6 (10/1/2012)	14 (10/1/2007)	(9.6 - 14)/(12 - 8)	-1.1
9.3 (10/1/2013)	14 (10/1/2007)	(9.3 - 14)/(13 - 8)	-0.94
12 (10/1/2009)	16 (10/1/2008)	(12 - 16)/(10 - 9)	-4
12 (10/1/2010)	16 (10/1/2008)	(12 - 16)/(11 - 9)	-2
9.6 (10/1/2012)	16 (10/1/2008)	(9.6 - 16)/(12 - 9)	-2.13333
9.3 (10/1/2013)	16 (10/1/2008)	(9.3 - 16)/(13 - 9)	-1.675
12 (10/1/2010)	12 (10/1/2009)	(12 - 12)/(11 - 10)	0
9.6 (10/1/2012)	12 (10/1/2009)	(9.6 - 12)/(12 - 10)	-1.2
9.3 (10/1/2013)	12 (10/1/2009)	(9.3 - 12)/(13 - 10)	-0.9
9.6 (10/1/2012)	12 (10/1/2010)	(9.6 - 12)/(12 - 11)	-2.4
9.3 (10/1/2013)	12 (10/1/2010)	(9.3 - 12)/(13 - 11)	-1.35
9.3 (10/1/2013)	9.6 (10/1/2012)	(9.3 - 9.6)/(13 - 12)	-0.3

Number of Q values = 78

Ordered Q Values

n	Q
1	-8
2	-4.7
3	-4.2
4	-4
5	-3.66667
6	-2.5
7	-2.4
8	-2.13333
9	-2
10	-2

11	-2
12	-1.8
13	-1.71429
14	-1.675
15	-1.63333
16	-1.6
17	-1.6
18	-1.5
19	-1.5
20	-1.5
21	-1.48
22	-1.4
23	-1.35
24	-1.25
25	-1.2
26	-1.14286
27	-1.13333
28	-1.12727
29	-1.11111
30	-1.1
31	-1.05833
32	-1
33	-1
34	-1
35	-0.96
36	-0.94
37	-0.933333
38	-0.914286
39	-0.9
40	-0.87
41	-0.857143
42	-0.8375
43	-0.833333
44	-0.82
45	-0.8
46	-0.8
47	-0.8
48	-0.772727
49	-0.757143
50	-0.75
51	-0.75
52	-0.725
53	-0.68
54	-0.666667
55	-0.666667
56	-0.666667
57	-0.65
58	-0.644444
59	-0.633333
60	-0.616667
61	-0.6
62	-0.52
63	-0.333333
64	-0.333333
65	-0.3
66	-0.3
67	-0.257143

68	-0.25
69	0
70	0
71	0.2
72	0.466667
73	0.666667
74	1
75	1.5
76	2
77	3.1
78	6

Sen's Estimator (Median Q) is -0.885

Tied Group	Value	Members
1	16	2
2	12	2

Time Period	Observations
10/1/2000	1
10/1/2001	1
10/1/2002	1
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 36
B = 0
C = 0
D = 0
E = 4
F = 0
a = 4836
b = 15444
c = 312
Group Variance = 266.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 20.9276
M1 = (78 - 20.9276)/2.0 = 28.5362
M2 = (78 + 20.9276)/2.0 + 1 = 50.4638
Lower limit is -1.11111 = Q(29)
Upper limit is -0.75 = Q(50)
-0.75 < 0 indicating a downward trend in data.

Sen's Slope Analysis
Parameter: cis12DCE
Location: 05-735
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
420 (10/1/2002)	189 (10/1/2001)	(420 - 189)/(2 - 1)	231
730 (10/1/2003)	189 (10/1/2001)	(730 - 189)/(3 - 1)	270.5
483 J (10/1/2004)	189 (10/1/2001)	(483 - 189)/(4 - 1)	98
542 J (10/1/2005)	189 (10/1/2001)	(542 - 189)/(5 - 1)	88.25
420 (10/1/2006)	189 (10/1/2001)	(420 - 189)/(6 - 1)	46.2
570 D (10/1/2007)	189 (10/1/2001)	(570 - 189)/(7 - 1)	63.5
340 JD (10/1/2008)	189 (10/1/2001)	(340 - 189)/(8 - 1)	21.5714
340 D (10/1/2009)	189 (10/1/2001)	(340 - 189)/(9 - 1)	18.875
400 D (10/1/2010)	189 (10/1/2001)	(400 - 189)/(10 - 1)	23.4444
280 DJ (10/1/2011)	189 (10/1/2001)	(280 - 189)/(11 - 1)	9.1
240 D (10/1/2012)	189 (10/1/2001)	(240 - 189)/(12 - 1)	4.63636
180 D (10/1/2013)	189 (10/1/2001)	(180 - 189)/(13 - 1)	-0.75
730 (10/1/2003)	420 (10/1/2002)	(730 - 420)/(3 - 2)	310
483 J (10/1/2004)	420 (10/1/2002)	(483 - 420)/(4 - 2)	31.5
542 J (10/1/2005)	420 (10/1/2002)	(542 - 420)/(5 - 2)	40.6667
420 (10/1/2006)	420 (10/1/2002)	(420 - 420)/(6 - 2)	0
570 D (10/1/2007)	420 (10/1/2002)	(570 - 420)/(7 - 2)	30
340 JD (10/1/2008)	420 (10/1/2002)	(340 - 420)/(8 - 2)	-13.3333
340 D (10/1/2009)	420 (10/1/2002)	(340 - 420)/(9 - 2)	-11.4286
400 D (10/1/2010)	420 (10/1/2002)	(400 - 420)/(10 - 2)	-2.5
280 DJ (10/1/2011)	420 (10/1/2002)	(280 - 420)/(11 - 2)	-15.5556
240 D (10/1/2012)	420 (10/1/2002)	(240 - 420)/(12 - 2)	-18
180 D (10/1/2013)	420 (10/1/2002)	(180 - 420)/(13 - 2)	-21.8182
483 J (10/1/2004)	730 (10/1/2003)	(483 - 730)/(4 - 3)	-247
542 J (10/1/2005)	730 (10/1/2003)	(542 - 730)/(5 - 3)	-94
420 (10/1/2006)	730 (10/1/2003)	(420 - 730)/(6 - 3)	-103.333
570 D (10/1/2007)	730 (10/1/2003)	(570 - 730)/(7 - 3)	-40
340 JD (10/1/2008)	730 (10/1/2003)	(340 - 730)/(8 - 3)	-78
340 D (10/1/2009)	730 (10/1/2003)	(340 - 730)/(9 - 3)	-65
400 D (10/1/2010)	730 (10/1/2003)	(400 - 730)/(10 - 3)	-47.1429
280 DJ (10/1/2011)	730 (10/1/2003)	(280 - 730)/(11 - 3)	-56.25
240 D (10/1/2012)	730 (10/1/2003)	(240 - 730)/(12 - 3)	-54.4444
180 D (10/1/2013)	730 (10/1/2003)	(180 - 730)/(13 - 3)	-55
542 J (10/1/2005)	483 J (10/1/2004)	(542 - 483)/(5 - 4)	59
420 (10/1/2006)	483 J (10/1/2004)	(420 - 483)/(6 - 4)	-31.5
570 D (10/1/2007)	483 J (10/1/2004)	(570 - 483)/(7 - 4)	29
340 JD (10/1/2008)	483 J (10/1/2004)	(340 - 483)/(8 - 4)	-35.75
340 D (10/1/2009)	483 J (10/1/2004)	(340 - 483)/(9 - 4)	-28.6
400 D (10/1/2010)	483 J (10/1/2004)	(400 - 483)/(10 - 4)	-13.8333
280 DJ (10/1/2011)	483 J (10/1/2004)	(280 - 483)/(11 - 4)	-29
240 D (10/1/2012)	483 J (10/1/2004)	(240 - 483)/(12 - 4)	-30.375
180 D (10/1/2013)	483 J (10/1/2004)	(180 - 483)/(13 - 4)	-33.6667
420 (10/1/2006)	542 J (10/1/2005)	(420 - 542)/(6 - 5)	-122
570 D (10/1/2007)	542 J (10/1/2005)	(570 - 542)/(7 - 5)	14

340 JD (10/1/2008)	542 J (10/1/2005)	(340 - 542)/(8 - 5)	-67.3333
340 D (10/1/2009)	542 J (10/1/2005)	(340 - 542)/(9 - 5)	-50.5
400 D (10/1/2010)	542 J (10/1/2005)	(400 - 542)/(10 - 5)	-28.4
280 DJ (10/1/2011)	542 J (10/1/2005)	(280 - 542)/(11 - 5)	-43.6667
240 D (10/1/2012)	542 J (10/1/2005)	(240 - 542)/(12 - 5)	-43.1429
180 D (10/1/2013)	542 J (10/1/2005)	(180 - 542)/(13 - 5)	-45.25
570 D (10/1/2007)	420 (10/1/2006)	(570 - 420)/(7 - 6)	150
340 JD (10/1/2008)	420 (10/1/2006)	(340 - 420)/(8 - 6)	-40
340 D (10/1/2009)	420 (10/1/2006)	(340 - 420)/(9 - 6)	-26.6667
400 D (10/1/2010)	420 (10/1/2006)	(400 - 420)/(10 - 6)	-5
280 DJ (10/1/2011)	420 (10/1/2006)	(280 - 420)/(11 - 6)	-28
240 D (10/1/2012)	420 (10/1/2006)	(240 - 420)/(12 - 6)	-30
180 D (10/1/2013)	420 (10/1/2006)	(180 - 420)/(13 - 6)	-34.2857
340 JD (10/1/2008)	570 D (10/1/2007)	(340 - 570)/(8 - 7)	-230
340 D (10/1/2009)	570 D (10/1/2007)	(340 - 570)/(9 - 7)	-115
400 D (10/1/2010)	570 D (10/1/2007)	(400 - 570)/(10 - 7)	-56.6667
280 DJ (10/1/2011)	570 D (10/1/2007)	(280 - 570)/(11 - 7)	-72.5
240 D (10/1/2012)	570 D (10/1/2007)	(240 - 570)/(12 - 7)	-66
180 D (10/1/2013)	570 D (10/1/2007)	(180 - 570)/(13 - 7)	-65
340 D (10/1/2009)	340 JD (10/1/2008)	(340 - 340)/(9 - 8)	0
400 D (10/1/2010)	340 JD (10/1/2008)	(400 - 340)/(10 - 8)	30
280 DJ (10/1/2011)	340 JD (10/1/2008)	(280 - 340)/(11 - 8)	-20
240 D (10/1/2012)	340 JD (10/1/2008)	(240 - 340)/(12 - 8)	-25
180 D (10/1/2013)	340 JD (10/1/2008)	(180 - 340)/(13 - 8)	-32
400 D (10/1/2010)	340 D (10/1/2009)	(400 - 340)/(10 - 9)	60
280 DJ (10/1/2011)	340 D (10/1/2009)	(280 - 340)/(11 - 9)	-30
240 D (10/1/2012)	340 D (10/1/2009)	(240 - 340)/(12 - 9)	-33.3333
180 D (10/1/2013)	340 D (10/1/2009)	(180 - 340)/(13 - 9)	-40
280 DJ (10/1/2011)	400 D (10/1/2010)	(280 - 400)/(11 - 10)	-120
240 D (10/1/2012)	400 D (10/1/2010)	(240 - 400)/(12 - 10)	-80
180 D (10/1/2013)	400 D (10/1/2010)	(180 - 400)/(13 - 10)	-73.3333
240 D (10/1/2012)	280 DJ (10/1/2011)	(240 - 280)/(12 - 11)	-40
180 D (10/1/2013)	280 DJ (10/1/2011)	(180 - 280)/(13 - 11)	-50
180 D (10/1/2013)	240 D (10/1/2012)	(180 - 240)/(13 - 12)	-60

Number of Q values = 78

Ordered Q Values

n	Q
1	-247
2	-230
3	-122
4	-120
5	-115
6	-103.333
7	-94
8	-80
9	-78
10	-73.3333

11	-72.5
12	-67.3333
13	-66
14	-65
15	-65
16	-60
17	-56.6667
18	-56.25
19	-55
20	-54.4444
21	-50.5
22	-50
23	-47.1429
24	-45.25
25	-43.6667
26	-43.1429
27	-40
28	-40
29	-40
30	-40
31	-35.75
32	-34.2857
33	-33.6667
34	-33.3333
35	-32
36	-31.5
37	-30.375
38	-30
39	-30
40	-29
41	-28.6
42	-28.4
43	-28
44	-26.6667
45	-25
46	-21.8182
47	-20
48	-18
49	-15.5556
50	-13.8333
51	-13.3333
52	-11.4286
53	-5
54	-2.5
55	-0.75
56	0
57	0
58	4.63636
59	9.1
60	14
61	18.875
62	21.5714
63	23.4444
64	29
65	30
66	30
67	31.5

68	40.6667
69	46.2
70	59
71	60
72	63.5
73	88.25
74	98
75	150
76	231
77	270.5
78	310

Sen's Estimator (Median Q) is -29.5

Tied Group	Value	Members
1	420	2
2	340	2

Time Period	Observations
10/1/2001	1
10/1/2002	1
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 36
B = 0
C = 0
D = 0
E = 4
F = 0
a = 4836
b = 15444
c = 312
Group Variance = 266.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 20.9276
M1 = (78 - 20.9276)/2.0 = 28.5362
M2 = (78 + 20.9276)/2.0 + 1 = 50.4638
Lower limit is -40 = Q(29)
Upper limit is -13.8333 = Q(50)
-13.8333 < 0 indicating a downward trend in data.

Sen's Slope Analysis
Parameter: Dissolved Lead
Location: MW14-5
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
29 (10/1/2001)	32.6 (10/1/2000)	(29 - 32.6)/(2 - 1)	-3.6
21.7 (10/1/2002)	32.6 (10/1/2000)	(21.7 - 32.6)/(3 - 1)	-5.45
84.6 (10/1/2003)	32.6 (10/1/2000)	(84.6 - 32.6)/(4 - 1)	17.3333
25.3 (10/1/2004)	32.6 (10/1/2000)	(25.3 - 32.6)/(5 - 1)	-1.825
20.8 (10/1/2005)	32.6 (10/1/2000)	(20.8 - 32.6)/(6 - 1)	-2.36
15 (10/1/2006)	32.6 (10/1/2000)	(15 - 32.6)/(7 - 1)	-2.93333
36.8 J (10/1/2007)	32.6 (10/1/2000)	(36.8 - 32.6)/(8 - 1)	0.6
23.8 (10/1/2008)	32.6 (10/1/2000)	(23.8 - 32.6)/(9 - 1)	-1.1
17.5 (10/1/2009)	32.6 (10/1/2000)	(17.5 - 32.6)/(10 - 1)	-1.67778
13.8 (10/1/2010)	32.6 (10/1/2000)	(13.8 - 32.6)/(11 - 1)	-1.88
17 (10/1/2011)	32.6 (10/1/2000)	(17 - 32.6)/(12 - 1)	-1.41818
27.9 (10/1/2012)	32.6 (10/1/2000)	(27.9 - 32.6)/(13 - 1)	-0.391667
21.7 (10/1/2002)	29 (10/1/2001)	(21.7 - 29)/(3 - 2)	-7.3
84.6 (10/1/2003)	29 (10/1/2001)	(84.6 - 29)/(4 - 2)	27.8
25.3 (10/1/2004)	29 (10/1/2001)	(25.3 - 29)/(5 - 2)	-1.23333
20.8 (10/1/2005)	29 (10/1/2001)	(20.8 - 29)/(6 - 2)	-2.05
15 (10/1/2006)	29 (10/1/2001)	(15 - 29)/(7 - 2)	-2.8
36.8 J (10/1/2007)	29 (10/1/2001)	(36.8 - 29)/(8 - 2)	1.3
23.8 (10/1/2008)	29 (10/1/2001)	(23.8 - 29)/(9 - 2)	-0.742857
17.5 (10/1/2009)	29 (10/1/2001)	(17.5 - 29)/(10 - 2)	-1.4375
13.8 (10/1/2010)	29 (10/1/2001)	(13.8 - 29)/(11 - 2)	-1.68889
17 (10/1/2011)	29 (10/1/2001)	(17 - 29)/(12 - 2)	-1.2
27.9 (10/1/2012)	29 (10/1/2001)	(27.9 - 29)/(13 - 2)	-0.1
84.6 (10/1/2003)	21.7 (10/1/2002)	(84.6 - 21.7)/(4 - 3)	62.9
25.3 (10/1/2004)	21.7 (10/1/2002)	(25.3 - 21.7)/(5 - 3)	1.8
20.8 (10/1/2005)	21.7 (10/1/2002)	(20.8 - 21.7)/(6 - 3)	-0.3
15 (10/1/2006)	21.7 (10/1/2002)	(15 - 21.7)/(7 - 3)	-1.675
36.8 J (10/1/2007)	21.7 (10/1/2002)	(36.8 - 21.7)/(8 - 3)	3.02
23.8 (10/1/2008)	21.7 (10/1/2002)	(23.8 - 21.7)/(9 - 3)	0.35
17.5 (10/1/2009)	21.7 (10/1/2002)	(17.5 - 21.7)/(10 - 3)	-0.6
13.8 (10/1/2010)	21.7 (10/1/2002)	(13.8 - 21.7)/(11 - 3)	-0.9875
17 (10/1/2011)	21.7 (10/1/2002)	(17 - 21.7)/(12 - 3)	-0.522222
27.9 (10/1/2012)	21.7 (10/1/2002)	(27.9 - 21.7)/(13 - 3)	0.62
25.3 (10/1/2004)	84.6 (10/1/2003)	(25.3 - 84.6)/(5 - 4)	-59.3
20.8 (10/1/2005)	84.6 (10/1/2003)	(20.8 - 84.6)/(6 - 4)	-31.9
15 (10/1/2006)	84.6 (10/1/2003)	(15 - 84.6)/(7 - 4)	-23.2
36.8 J (10/1/2007)	84.6 (10/1/2003)	(36.8 - 84.6)/(8 - 4)	-11.95
23.8 (10/1/2008)	84.6 (10/1/2003)	(23.8 - 84.6)/(9 - 4)	-12.16
17.5 (10/1/2009)	84.6 (10/1/2003)	(17.5 - 84.6)/(10 - 4)	-11.1833
13.8 (10/1/2010)	84.6 (10/1/2003)	(13.8 - 84.6)/(11 - 4)	-10.1143
17 (10/1/2011)	84.6 (10/1/2003)	(17 - 84.6)/(12 - 4)	-8.45
27.9 (10/1/2012)	84.6 (10/1/2003)	(27.9 - 84.6)/(13 - 4)	-6.3
20.8 (10/1/2005)	25.3 (10/1/2004)	(20.8 - 25.3)/(6 - 5)	-4.5
15 (10/1/2006)	25.3 (10/1/2004)	(15 - 25.3)/(7 - 5)	-5.15

36.8 J (10/1/2007)	25.3 (10/1/2004)	(36.8 - 25.3)/(8 - 5)	3.83333
23.8 (10/1/2008)	25.3 (10/1/2004)	(23.8 - 25.3)/(9 - 5)	-0.375
17.5 (10/1/2009)	25.3 (10/1/2004)	(17.5 - 25.3)/(10 - 5)	-1.56
13.8 (10/1/2010)	25.3 (10/1/2004)	(13.8 - 25.3)/(11 - 5)	-1.91667
17 (10/1/2011)	25.3 (10/1/2004)	(17 - 25.3)/(12 - 5)	-1.18571
27.9 (10/1/2012)	25.3 (10/1/2004)	(27.9 - 25.3)/(13 - 5)	0.325
15 (10/1/2006)	20.8 (10/1/2005)	(15 - 20.8)/(7 - 6)	-5.8
36.8 J (10/1/2007)	20.8 (10/1/2005)	(36.8 - 20.8)/(8 - 6)	8
23.8 (10/1/2008)	20.8 (10/1/2005)	(23.8 - 20.8)/(9 - 6)	1
17.5 (10/1/2009)	20.8 (10/1/2005)	(17.5 - 20.8)/(10 - 6)	-0.825
13.8 (10/1/2010)	20.8 (10/1/2005)	(13.8 - 20.8)/(11 - 6)	-1.4
17 (10/1/2011)	20.8 (10/1/2005)	(17 - 20.8)/(12 - 6)	-0.633333
27.9 (10/1/2012)	20.8 (10/1/2005)	(27.9 - 20.8)/(13 - 6)	1.01429
36.8 J (10/1/2007)	15 (10/1/2006)	(36.8 - 15)/(8 - 7)	21.8
23.8 (10/1/2008)	15 (10/1/2006)	(23.8 - 15)/(9 - 7)	4.4
17.5 (10/1/2009)	15 (10/1/2006)	(17.5 - 15)/(10 - 7)	0.833333
13.8 (10/1/2010)	15 (10/1/2006)	(13.8 - 15)/(11 - 7)	-0.3
17 (10/1/2011)	15 (10/1/2006)	(17 - 15)/(12 - 7)	0.4
27.9 (10/1/2012)	15 (10/1/2006)	(27.9 - 15)/(13 - 7)	2.15
23.8 (10/1/2008)	36.8 J (10/1/2007)	(23.8 - 36.8)/(9 - 8)	-13
17.5 (10/1/2009)	36.8 J (10/1/2007)	(17.5 - 36.8)/(10 - 8)	-9.65
13.8 (10/1/2010)	36.8 J (10/1/2007)	(13.8 - 36.8)/(11 - 8)	-7.66667
17 (10/1/2011)	36.8 J (10/1/2007)	(17 - 36.8)/(12 - 8)	-4.95
27.9 (10/1/2012)	36.8 J (10/1/2007)	(27.9 - 36.8)/(13 - 8)	-1.78
17.5 (10/1/2009)	23.8 (10/1/2008)	(17.5 - 23.8)/(10 - 9)	-6.3
13.8 (10/1/2010)	23.8 (10/1/2008)	(13.8 - 23.8)/(11 - 9)	-5
17 (10/1/2011)	23.8 (10/1/2008)	(17 - 23.8)/(12 - 9)	-2.26667
27.9 (10/1/2012)	23.8 (10/1/2008)	(27.9 - 23.8)/(13 - 9)	1.025
13.8 (10/1/2010)	17.5 (10/1/2009)	(13.8 - 17.5)/(11 - 10)	-3.7
17 (10/1/2011)	17.5 (10/1/2009)	(17 - 17.5)/(12 - 10)	-0.25
27.9 (10/1/2012)	17.5 (10/1/2009)	(27.9 - 17.5)/(13 - 10)	3.46667
17 (10/1/2011)	13.8 (10/1/2010)	(17 - 13.8)/(12 - 11)	3.2
27.9 (10/1/2012)	13.8 (10/1/2010)	(27.9 - 13.8)/(13 - 11)	7.05
27.9 (10/1/2012)	17 (10/1/2011)	(27.9 - 17)/(13 - 12)	10.9

Number of Q values = 78

Ordered Q Values

n	Q
1	-59.3
2	-31.9
3	-23.2
4	-13
5	-12.16
6	-11.95
7	-11.1833
8	-10.1143
9	-9.65
10	-8.45

11	-7.66667
12	-7.3
13	-6.3
14	-6.3
15	-5.8
16	-5.45
17	-5.15
18	-5
19	-4.95
20	-4.5
21	-3.7
22	-3.6
23	-2.93333
24	-2.8
25	-2.36
26	-2.26667
27	-2.05
28	-1.91667
29	-1.88
30	-1.825
31	-1.78
32	-1.68889
33	-1.67778
34	-1.675
35	-1.56
36	-1.4375
37	-1.41818
38	-1.4
39	-1.23333
40	-1.2
41	-1.18571
42	-1.1
43	-0.9875
44	-0.825
45	-0.742857
46	-0.633333
47	-0.6
48	-0.522222
49	-0.391667
50	-0.375
51	-0.3
52	-0.3
53	-0.25
54	-0.1
55	0.325
56	0.35
57	0.4
58	0.6
59	0.62
60	0.833333
61	1
62	1.01429
63	1.025
64	1.3
65	1.8
66	2.15
67	3.02

68	3.2
69	3.46667
70	3.83333
71	4.4
72	7.05
73	8
74	10.9
75	17.3333
76	21.8
77	27.8
78	62.9

Sen's Estimator (Median Q) is -1.21667

Time Period	Observations
10/1/2000	1
10/1/2001	1
10/1/2002	1
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0
a = 4836
b = 15444
c = 312
Group Variance = 268.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 21.006
M1 = (78 - 21.006)/2.0 = 28.497
M2 = (78 + 21.006)/2.0 + 1 = 50.503
Lower limit is -1.91667 = Q(28)
Upper limit is -0.3 = Q(51)
-0.3 < 0 indicating a downward trend in data.

Sen's Slope Analysis
Parameter: DRO
Location: 03-420
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
4900 (10/1/2002)	12300 (10/1/2001)	(4900 - 12300)/(2 - 1)	-7400
4900 (10/1/2003)	12300 (10/1/2001)	(4900 - 12300)/(3 - 1)	-3700
5454 (10/1/2004)	12300 (10/1/2001)	(5454 - 12300)/(4 - 1)	-2282
5650 J (10/1/2005)	12300 (10/1/2001)	(5650 - 12300)/(5 - 1)	-1662.5
3800 (10/1/2006)	12300 (10/1/2001)	(3800 - 12300)/(6 - 1)	-1700
2400 Y (10/1/2007)	12300 (10/1/2001)	(2400 - 12300)/(7 - 1)	-1650
3300 Y (10/1/2008)	12300 (10/1/2001)	(3300 - 12300)/(8 - 1)	-1285.71
2200 Y (10/1/2009)	12300 (10/1/2001)	(2200 - 12300)/(9 - 1)	-1262.5
4300 Y (10/1/2011)	12300 (10/1/2001)	(4300 - 12300)/(10 - 1)	-888.889
3300 Y (10/1/2013)	12300 (10/1/2001)	(3300 - 12300)/(11 - 1)	-900
4900 (10/1/2003)	4900 (10/1/2002)	(4900 - 4900)/(3 - 2)	0
5454 (10/1/2004)	4900 (10/1/2002)	(5454 - 4900)/(4 - 2)	277
5650 J (10/1/2005)	4900 (10/1/2002)	(5650 - 4900)/(5 - 2)	250
3800 (10/1/2006)	4900 (10/1/2002)	(3800 - 4900)/(6 - 2)	-275
2400 Y (10/1/2007)	4900 (10/1/2002)	(2400 - 4900)/(7 - 2)	-500
3300 Y (10/1/2008)	4900 (10/1/2002)	(3300 - 4900)/(8 - 2)	-266.667
2200 Y (10/1/2009)	4900 (10/1/2002)	(2200 - 4900)/(9 - 2)	-385.714
4300 Y (10/1/2011)	4900 (10/1/2002)	(4300 - 4900)/(10 - 2)	-75
3300 Y (10/1/2013)	4900 (10/1/2002)	(3300 - 4900)/(11 - 2)	-177.778
5454 (10/1/2004)	4900 (10/1/2003)	(5454 - 4900)/(4 - 3)	554
5650 J (10/1/2005)	4900 (10/1/2003)	(5650 - 4900)/(5 - 3)	375
3800 (10/1/2006)	4900 (10/1/2003)	(3800 - 4900)/(6 - 3)	-366.667
2400 Y (10/1/2007)	4900 (10/1/2003)	(2400 - 4900)/(7 - 3)	-625
3300 Y (10/1/2008)	4900 (10/1/2003)	(3300 - 4900)/(8 - 3)	-320
2200 Y (10/1/2009)	4900 (10/1/2003)	(2200 - 4900)/(9 - 3)	-450
4300 Y (10/1/2011)	4900 (10/1/2003)	(4300 - 4900)/(10 - 3)	-85.7143
3300 Y (10/1/2013)	4900 (10/1/2003)	(3300 - 4900)/(11 - 3)	-200
5650 J (10/1/2005)	5454 (10/1/2004)	(5650 - 5454)/(5 - 4)	196
3800 (10/1/2006)	5454 (10/1/2004)	(3800 - 5454)/(6 - 4)	-827
2400 Y (10/1/2007)	5454 (10/1/2004)	(2400 - 5454)/(7 - 4)	-1018
3300 Y (10/1/2008)	5454 (10/1/2004)	(3300 - 5454)/(8 - 4)	-538.5
2200 Y (10/1/2009)	5454 (10/1/2004)	(2200 - 5454)/(9 - 4)	-650.8
4300 Y (10/1/2011)	5454 (10/1/2004)	(4300 - 5454)/(10 - 4)	-192.333
3300 Y (10/1/2013)	5454 (10/1/2004)	(3300 - 5454)/(11 - 4)	-307.714
3800 (10/1/2006)	5650 J (10/1/2005)	(3800 - 5650)/(6 - 5)	-1850
2400 Y (10/1/2007)	5650 J (10/1/2005)	(2400 - 5650)/(7 - 5)	-1625
3300 Y (10/1/2008)	5650 J (10/1/2005)	(3300 - 5650)/(8 - 5)	-783.333
2200 Y (10/1/2009)	5650 J (10/1/2005)	(2200 - 5650)/(9 - 5)	-862.5
4300 Y (10/1/2011)	5650 J (10/1/2005)	(4300 - 5650)/(10 - 5)	-270
3300 Y (10/1/2013)	5650 J (10/1/2005)	(3300 - 5650)/(11 - 5)	-391.667
2400 Y (10/1/2007)	3800 (10/1/2006)	(2400 - 3800)/(7 - 6)	-1400
3300 Y (10/1/2008)	3800 (10/1/2006)	(3300 - 3800)/(8 - 6)	-250
2200 Y (10/1/2009)	3800 (10/1/2006)	(2200 - 3800)/(9 - 6)	-533.333

4300 Y (10/1/2011)	3800 (10/1/2006)	(4300 - 3800)/(10 - 6)	125
3300 Y (10/1/2013)	3800 (10/1/2006)	(3300 - 3800)/(11 - 6)	-100
3300 Y (10/1/2008)	2400 Y (10/1/2007)	(3300 - 2400)/(8 - 7)	900
2200 Y (10/1/2009)	2400 Y (10/1/2007)	(2200 - 2400)/(9 - 7)	-100
4300 Y (10/1/2011)	2400 Y (10/1/2007)	(4300 - 2400)/(10 - 7)	633.333
3300 Y (10/1/2013)	2400 Y (10/1/2007)	(3300 - 2400)/(11 - 7)	225
2200 Y (10/1/2009)	3300 Y (10/1/2008)	(2200 - 3300)/(9 - 8)	-1100
4300 Y (10/1/2011)	3300 Y (10/1/2008)	(4300 - 3300)/(10 - 8)	500
3300 Y (10/1/2013)	3300 Y (10/1/2008)	(3300 - 3300)/(11 - 8)	0
4300 Y (10/1/2011)	2200 Y (10/1/2009)	(4300 - 2200)/(10 - 9)	2100
3300 Y (10/1/2013)	2200 Y (10/1/2009)	(3300 - 2200)/(11 - 9)	550
3300 Y (10/1/2013)	4300 Y (10/1/2011)	(3300 - 4300)/(11 - 10)	-1000

Number of Q values = 55

Ordered Q Values

n	Q
1	-7400
2	-3700
3	-2282
4	-1850
5	-1700
6	-1662.5
7	-1650
8	-1625
9	-1400
10	-1285.71
11	-1262.5
12	-1100
13	-1018
14	-1000
15	-900
16	-888.889
17	-862.5
18	-827
19	-783.333
20	-650.8
21	-625
22	-538.5
23	-533.333
24	-500
25	-450
26	-391.667
27	-385.714
28	-366.667
29	-320
30	-307.714
31	-275
32	-270
33	-266.667
34	-250
35	-200

36	-192.333
37	-177.778
38	-100
39	-100
40	-85.7143
41	-75
42	0
43	0
44	125
45	196
46	225
47	250
48	277
49	375
50	500
51	550
52	554
53	633.333
54	900
55	2100

Sen's Estimator (Median Q) is -366.667

Tied Group	Value	Members
1	4900	2
2	3300	2

Time Period	Observations
10/1/2001	1
10/1/2002	1
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2011	1
10/1/2013	1

There are 0 time periods with multiple data

A = 36
B = 0
C = 0
D = 0
E = 4
F = 0
a = 2970
b = 8910
c = 220
Group Variance = 163
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 16.3617
M1 = (55 - 16.3617)/2.0 = 19.3191
M2 = (55 + 16.3617)/2.0 + 1 = 36.6809
Lower limit is -783.333 = Q(19)
Upper limit is -177.778 = Q(37)
-177.778 < 0 indicating a downward trend in data.

Sen's Slope Analysis

Parameter: DRO

Location: 03-890

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
10000 Y (10/1/2010)	44000 YJ (10/1/2009)	(10000 - 44000)/(2 - 1)	-34000
13000 Y (10/1/2011)	44000 YJ (10/1/2009)	(13000 - 44000)/(3 - 1)	-15500
11000 Y (10/1/2013)	44000 YJ (10/1/2009)	(11000 - 44000)/(4 - 1)	-11000
13000 Y (10/1/2011)	10000 Y (10/1/2010)	(13000 - 10000)/(3 - 2)	3000
11000 Y (10/1/2013)	10000 Y (10/1/2010)	(11000 - 10000)/(4 - 2)	500
11000 Y (10/1/2013)	13000 Y (10/1/2011)	(11000 - 13000)/(4 - 3)	-2000

Number of Q values = 6

Ordered Q Values

n	Q
1	-34000
2	-15500
3	-11000
4	-2000
5	500
6	3000

Sen's Estimator (Median Q) is -6500

Time Period	Observations
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2013	1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0
a = 156
b = 216
c = 24
Group Variance = 8.66667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 3.77278
M1 = (6 - 3.77278)/2.0 = 1.11361
M2 = (6 + 3.77278)/2.0 + 1 = 5.88639
Lower limit is -34000 = Q(1)
Upper limit is 3000 = Q(6)
-34000 < 0 < 3000 indicating no trend in data.

Sen's Slope Analysis
Parameter: DRO
Location: 02-230
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
3500 (10/1/2002)	4230 (10/1/2001)	(3500 - 4230)/(2 - 1)	-730
3900 (10/1/2003)	4230 (10/1/2001)	(3900 - 4230)/(3 - 1)	-165
5760 (10/1/2004)	4230 (10/1/2001)	(5760 - 4230)/(4 - 1)	510
4060 J (10/1/2005)	4230 (10/1/2001)	(4060 - 4230)/(5 - 1)	-42.5
5500 (10/1/2006)	4230 (10/1/2001)	(5500 - 4230)/(6 - 1)	254
4800 Y (10/1/2007)	4230 (10/1/2001)	(4800 - 4230)/(7 - 1)	95
5000 Y (10/1/2008)	4230 (10/1/2001)	(5000 - 4230)/(8 - 1)	110
2400 Y (10/1/2009)	4230 (10/1/2001)	(2400 - 4230)/(9 - 1)	-228.75
4000 Y (10/1/2010)	4230 (10/1/2001)	(4000 - 4230)/(10 - 1)	-25.5556
4200 Y (10/1/2011)	4230 (10/1/2001)	(4200 - 4230)/(11 - 1)	-3
3200 Y (10/1/2012)	4230 (10/1/2001)	(3200 - 4230)/(12 - 1)	-93.6364
3500 Y (10/1/2013)	4230 (10/1/2001)	(3500 - 4230)/(13 - 1)	-60.8333
3900 (10/1/2003)	3500 (10/1/2002)	(3900 - 3500)/(3 - 2)	400
5760 (10/1/2004)	3500 (10/1/2002)	(5760 - 3500)/(4 - 2)	1130
4060 J (10/1/2005)	3500 (10/1/2002)	(4060 - 3500)/(5 - 2)	186.667
5500 (10/1/2006)	3500 (10/1/2002)	(5500 - 3500)/(6 - 2)	500
4800 Y (10/1/2007)	3500 (10/1/2002)	(4800 - 3500)/(7 - 2)	260
5000 Y (10/1/2008)	3500 (10/1/2002)	(5000 - 3500)/(8 - 2)	250
2400 Y (10/1/2009)	3500 (10/1/2002)	(2400 - 3500)/(9 - 2)	-157.143
4000 Y (10/1/2010)	3500 (10/1/2002)	(4000 - 3500)/(10 - 2)	62.5
4200 Y (10/1/2011)	3500 (10/1/2002)	(4200 - 3500)/(11 - 2)	77.7778
3200 Y (10/1/2012)	3500 (10/1/2002)	(3200 - 3500)/(12 - 2)	-30
3500 Y (10/1/2013)	3500 (10/1/2002)	(3500 - 3500)/(13 - 2)	0
5760 (10/1/2004)	3900 (10/1/2003)	(5760 - 3900)/(4 - 3)	1860
4060 J (10/1/2005)	3900 (10/1/2003)	(4060 - 3900)/(5 - 3)	80
5500 (10/1/2006)	3900 (10/1/2003)	(5500 - 3900)/(6 - 3)	533.333
4800 Y (10/1/2007)	3900 (10/1/2003)	(4800 - 3900)/(7 - 3)	225
5000 Y (10/1/2008)	3900 (10/1/2003)	(5000 - 3900)/(8 - 3)	220
2400 Y (10/1/2009)	3900 (10/1/2003)	(2400 - 3900)/(9 - 3)	-250
4000 Y (10/1/2010)	3900 (10/1/2003)	(4000 - 3900)/(10 - 3)	14.2857
4200 Y (10/1/2011)	3900 (10/1/2003)	(4200 - 3900)/(11 - 3)	37.5
3200 Y (10/1/2012)	3900 (10/1/2003)	(3200 - 3900)/(12 - 3)	-77.7778
3500 Y (10/1/2013)	3900 (10/1/2003)	(3500 - 3900)/(13 - 3)	-40
4060 J (10/1/2005)	5760 (10/1/2004)	(4060 - 5760)/(5 - 4)	-1700
5500 (10/1/2006)	5760 (10/1/2004)	(5500 - 5760)/(6 - 4)	-130
4800 Y (10/1/2007)	5760 (10/1/2004)	(4800 - 5760)/(7 - 4)	-320
5000 Y (10/1/2008)	5760 (10/1/2004)	(5000 - 5760)/(8 - 4)	-190
2400 Y (10/1/2009)	5760 (10/1/2004)	(2400 - 5760)/(9 - 4)	-672
4000 Y (10/1/2010)	5760 (10/1/2004)	(4000 - 5760)/(10 - 4)	-293.333
4200 Y (10/1/2011)	5760 (10/1/2004)	(4200 - 5760)/(11 - 4)	-222.857
3200 Y (10/1/2012)	5760 (10/1/2004)	(3200 - 5760)/(12 - 4)	-320
3500 Y (10/1/2013)	5760 (10/1/2004)	(3500 - 5760)/(13 - 4)	-251.111
5500 (10/1/2006)	4060 J (10/1/2005)	(5500 - 4060)/(6 - 5)	1440
4800 Y (10/1/2007)	4060 J (10/1/2005)	(4800 - 4060)/(7 - 5)	370

5000 Y (10/1/2008)	4060 J (10/1/2005)	(5000 - 4060)/(8 - 5)	313.333
2400 Y (10/1/2009)	4060 J (10/1/2005)	(2400 - 4060)/(9 - 5)	-415
4000 Y (10/1/2010)	4060 J (10/1/2005)	(4000 - 4060)/(10 - 5)	-12
4200 Y (10/1/2011)	4060 J (10/1/2005)	(4200 - 4060)/(11 - 5)	23.3333
3200 Y (10/1/2012)	4060 J (10/1/2005)	(3200 - 4060)/(12 - 5)	-122.857
3500 Y (10/1/2013)	4060 J (10/1/2005)	(3500 - 4060)/(13 - 5)	-70
4800 Y (10/1/2007)	5500 (10/1/2006)	(4800 - 5500)/(7 - 6)	-700
5000 Y (10/1/2008)	5500 (10/1/2006)	(5000 - 5500)/(8 - 6)	-250
2400 Y (10/1/2009)	5500 (10/1/2006)	(2400 - 5500)/(9 - 6)	-1033.33
4000 Y (10/1/2010)	5500 (10/1/2006)	(4000 - 5500)/(10 - 6)	-375
4200 Y (10/1/2011)	5500 (10/1/2006)	(4200 - 5500)/(11 - 6)	-260
3200 Y (10/1/2012)	5500 (10/1/2006)	(3200 - 5500)/(12 - 6)	-383.333
3500 Y (10/1/2013)	5500 (10/1/2006)	(3500 - 5500)/(13 - 6)	-285.714
5000 Y (10/1/2008)	4800 Y (10/1/2007)	(5000 - 4800)/(8 - 7)	200
2400 Y (10/1/2009)	4800 Y (10/1/2007)	(2400 - 4800)/(9 - 7)	-1200
4000 Y (10/1/2010)	4800 Y (10/1/2007)	(4000 - 4800)/(10 - 7)	-266.667
4200 Y (10/1/2011)	4800 Y (10/1/2007)	(4200 - 4800)/(11 - 7)	-150
3200 Y (10/1/2012)	4800 Y (10/1/2007)	(3200 - 4800)/(12 - 7)	-320
3500 Y (10/1/2013)	4800 Y (10/1/2007)	(3500 - 4800)/(13 - 7)	-216.667
2400 Y (10/1/2009)	5000 Y (10/1/2008)	(2400 - 5000)/(9 - 8)	-2600
4000 Y (10/1/2010)	5000 Y (10/1/2008)	(4000 - 5000)/(10 - 8)	-500
4200 Y (10/1/2011)	5000 Y (10/1/2008)	(4200 - 5000)/(11 - 8)	-266.667
3200 Y (10/1/2012)	5000 Y (10/1/2008)	(3200 - 5000)/(12 - 8)	-450
3500 Y (10/1/2013)	5000 Y (10/1/2008)	(3500 - 5000)/(13 - 8)	-300
4000 Y (10/1/2010)	2400 Y (10/1/2009)	(4000 - 2400)/(10 - 9)	1600
4200 Y (10/1/2011)	2400 Y (10/1/2009)	(4200 - 2400)/(11 - 9)	900
3200 Y (10/1/2012)	2400 Y (10/1/2009)	(3200 - 2400)/(12 - 9)	266.667
3500 Y (10/1/2013)	2400 Y (10/1/2009)	(3500 - 2400)/(13 - 9)	275
4200 Y (10/1/2011)	4000 Y (10/1/2010)	(4200 - 4000)/(11 - 10)	200
3200 Y (10/1/2012)	4000 Y (10/1/2010)	(3200 - 4000)/(12 - 10)	-400
3500 Y (10/1/2013)	4000 Y (10/1/2010)	(3500 - 4000)/(13 - 10)	-166.667
3200 Y (10/1/2012)	4200 Y (10/1/2011)	(3200 - 4200)/(12 - 11)	-1000
3500 Y (10/1/2013)	4200 Y (10/1/2011)	(3500 - 4200)/(13 - 11)	-350
3500 Y (10/1/2013)	3200 Y (10/1/2012)	(3500 - 3200)/(13 - 12)	300

Number of Q values = 78

Ordered Q Values

n	Q
1	-2600
2	-1700
3	-1200
4	-1033.33
5	-1000
6	-730
7	-700
8	-672
9	-500
10	-450

11	-415
12	-400
13	-383.333
14	-375
15	-350
16	-320
17	-320
18	-320
19	-300
20	-293.333
21	-285.714
22	-266.667
23	-266.667
24	-260
25	-251.111
26	-250
27	-250
28	-228.75
29	-222.857
30	-216.667
31	-190
32	-166.667
33	-165
34	-157.143
35	-150
36	-130
37	-122.857
38	-93.6364
39	-77.7778
40	-70
41	-60.8333
42	-42.5
43	-40
44	-30
45	-25.5556
46	-12
47	-3
48	0
49	14.2857
50	23.3333
51	37.5
52	62.5
53	77.7778
54	80
55	95
56	110
57	186.667
58	200
59	200
60	220
61	225
62	250
63	254
64	260
65	266.667
66	275
67	300

68	313.333
69	370
70	400
71	500
72	510
73	533.333
74	900
75	1130
76	1440
77	1600
78	1860

Sen's Estimator (Median Q) is -73.8889

Tied Group	Value	Members
1	3500	2

Time Period	Observations
10/1/2001	1
10/1/2002	1
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 4836
b = 15444
c = 312
Group Variance = 267.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 20.9668
M1 = (78 - 20.9668)/2.0 = 28.5166
M2 = (78 + 20.9668)/2.0 + 1 = 50.4834
Lower limit is -222.857 = Q(29)
Upper limit is 23.3333 = Q(50)
-222.857 < 0 < 23.3333 indicating no trend in data.

Sen's Slope Analysis

Parameter: DRO
Location: MW-107-1

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
4000 Y (10/1/2007)	3400 (10/1/2006)	(4000 - 3400)/(2 - 1)	600
4100 Y (10/1/2008)	3400 (10/1/2006)	(4100 - 3400)/(3 - 1)	350
3400 Y (10/1/2009)	3400 (10/1/2006)	(3400 - 3400)/(4 - 1)	0
4400 Y (10/1/2010)	3400 (10/1/2006)	(4400 - 3400)/(5 - 1)	250
3600 Y (10/1/2011)	3400 (10/1/2006)	(3600 - 3400)/(6 - 1)	40
2900 Y (10/1/2012)	3400 (10/1/2006)	(2900 - 3400)/(7 - 1)	-83.3333
2700 Y (10/1/2013)	3400 (10/1/2006)	(2700 - 3400)/(8 - 1)	-100
4100 Y (10/1/2008)	4000 Y (10/1/2007)	(4100 - 4000)/(3 - 2)	100
3400 Y (10/1/2009)	4000 Y (10/1/2007)	(3400 - 4000)/(4 - 2)	-300
4400 Y (10/1/2010)	4000 Y (10/1/2007)	(4400 - 4000)/(5 - 2)	133.333
3600 Y (10/1/2011)	4000 Y (10/1/2007)	(3600 - 4000)/(6 - 2)	-100
2900 Y (10/1/2012)	4000 Y (10/1/2007)	(2900 - 4000)/(7 - 2)	-220
2700 Y (10/1/2013)	4000 Y (10/1/2007)	(2700 - 4000)/(8 - 2)	-216.667
3400 Y (10/1/2009)	4100 Y (10/1/2008)	(3400 - 4100)/(4 - 3)	-700
4400 Y (10/1/2010)	4100 Y (10/1/2008)	(4400 - 4100)/(5 - 3)	150
3600 Y (10/1/2011)	4100 Y (10/1/2008)	(3600 - 4100)/(6 - 3)	-166.667
2900 Y (10/1/2012)	4100 Y (10/1/2008)	(2900 - 4100)/(7 - 3)	-300
2700 Y (10/1/2013)	4100 Y (10/1/2008)	(2700 - 4100)/(8 - 3)	-280
4400 Y (10/1/2010)	3400 Y (10/1/2009)	(4400 - 3400)/(5 - 4)	1000
3600 Y (10/1/2011)	3400 Y (10/1/2009)	(3600 - 3400)/(6 - 4)	100
2900 Y (10/1/2012)	3400 Y (10/1/2009)	(2900 - 3400)/(7 - 4)	-166.667
2700 Y (10/1/2013)	3400 Y (10/1/2009)	(2700 - 3400)/(8 - 4)	-175
3600 Y (10/1/2011)	4400 Y (10/1/2010)	(3600 - 4400)/(6 - 5)	-800
2900 Y (10/1/2012)	4400 Y (10/1/2010)	(2900 - 4400)/(7 - 5)	-750
2700 Y (10/1/2013)	4400 Y (10/1/2010)	(2700 - 4400)/(8 - 5)	-566.667
2900 Y (10/1/2012)	3600 Y (10/1/2011)	(2900 - 3600)/(7 - 6)	-700
2700 Y (10/1/2013)	3600 Y (10/1/2011)	(2700 - 3600)/(8 - 6)	-450
2700 Y (10/1/2013)	2900 Y (10/1/2012)	(2700 - 2900)/(8 - 7)	-200

Number of Q values = 28

Ordered Q Values

n	Q
1	-800
2	-750
3	-700
4	-700
5	-566.667
6	-450
7	-300

8	-300
9	-280
10	-220
11	-216.667
12	-200
13	-175
14	-166.667
15	-166.667
16	-100
17	-100
18	-83.3333
19	0
20	40
21	100
22	100
23	133.333
24	150
25	250
26	350
27	600
28	1000

Sen's Estimator (Median Q) is -166.667

Tied Group	Value	Members
1	3400	2

Time Period	Observations
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 1176
b = 3024
c = 112
Group Variance = 64.3333
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 10.2791
M1 = (28 - 10.2791)/2.0 = 8.86046
M2 = (28 + 10.2791)/2.0 + 1 = 20.1395
Lower limit is -280 = Q(9)
Upper limit is 40 = Q(20)
-280 < 0 < 40 indicating no trend in data.

Sen's Slope Analysis

Parameter: DRO
Location: MW-187-1

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
3300 Y (10/1/2007)	3900 (10/1/2006)	(3300 - 3900)/(2 - 1)	-600
3500 Y (10/1/2008)	3900 (10/1/2006)	(3500 - 3900)/(3 - 1)	-200
2400 Y (10/1/2009)	3900 (10/1/2006)	(2400 - 3900)/(4 - 1)	-500
4400 Z (10/1/2010)	3900 (10/1/2006)	(4400 - 3900)/(5 - 1)	125
2400 Y (10/1/2011)	3900 (10/1/2006)	(2400 - 3900)/(6 - 1)	-300
2300 Y (10/1/2012)	3900 (10/1/2006)	(2300 - 3900)/(7 - 1)	-266.667
2800 Y (10/1/2013)	3900 (10/1/2006)	(2800 - 3900)/(8 - 1)	-157.143
3500 Y (10/1/2008)	3300 Y (10/1/2007)	(3500 - 3300)/(3 - 2)	200
2400 Y (10/1/2009)	3300 Y (10/1/2007)	(2400 - 3300)/(4 - 2)	-450
4400 Z (10/1/2010)	3300 Y (10/1/2007)	(4400 - 3300)/(5 - 2)	366.667
2400 Y (10/1/2011)	3300 Y (10/1/2007)	(2400 - 3300)/(6 - 2)	-225
2300 Y (10/1/2012)	3300 Y (10/1/2007)	(2300 - 3300)/(7 - 2)	-200
2800 Y (10/1/2013)	3300 Y (10/1/2007)	(2800 - 3300)/(8 - 2)	-83.3333
2400 Y (10/1/2009)	3500 Y (10/1/2008)	(2400 - 3500)/(4 - 3)	-1100
4400 Z (10/1/2010)	3500 Y (10/1/2008)	(4400 - 3500)/(5 - 3)	450
2400 Y (10/1/2011)	3500 Y (10/1/2008)	(2400 - 3500)/(6 - 3)	-366.667
2300 Y (10/1/2012)	3500 Y (10/1/2008)	(2300 - 3500)/(7 - 3)	-300
2800 Y (10/1/2013)	3500 Y (10/1/2008)	(2800 - 3500)/(8 - 3)	-140
4400 Z (10/1/2010)	2400 Y (10/1/2009)	(4400 - 2400)/(5 - 4)	2000
2400 Y (10/1/2011)	2400 Y (10/1/2009)	(2400 - 2400)/(6 - 4)	0
2300 Y (10/1/2012)	2400 Y (10/1/2009)	(2300 - 2400)/(7 - 4)	-33.3333
2800 Y (10/1/2013)	2400 Y (10/1/2009)	(2800 - 2400)/(8 - 4)	100
2400 Y (10/1/2011)	4400 Z (10/1/2010)	(2400 - 4400)/(6 - 5)	-2000
2300 Y (10/1/2012)	4400 Z (10/1/2010)	(2300 - 4400)/(7 - 5)	-1050
2800 Y (10/1/2013)	4400 Z (10/1/2010)	(2800 - 4400)/(8 - 5)	-533.333
2300 Y (10/1/2012)	2400 Y (10/1/2011)	(2300 - 2400)/(7 - 6)	-100
2800 Y (10/1/2013)	2400 Y (10/1/2011)	(2800 - 2400)/(8 - 6)	200
2800 Y (10/1/2013)	2300 Y (10/1/2012)	(2800 - 2300)/(8 - 7)	500

Number of Q values = 28

Ordered Q Values

n	Q
1	-2000
2	-1100
3	-1050
4	-600
5	-533.333
6	-500
7	-450

8	-366.667
9	-300
10	-300
11	-266.667
12	-225
13	-200
14	-200
15	-157.143
16	-140
17	-100
18	-83.3333
19	-33.3333
20	0
21	100
22	125
23	200
24	200
25	366.667
26	450
27	500
28	2000

Sen's Estimator (Median Q) is -178.571

Tied Group	Value	Members
1	2400	2

Time Period	Observations
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 1176
b = 3024
c = 112
Group Variance = 64.3333
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 10.2791
M1 = (28 - 10.2791)/2.0 = 8.86046
M2 = (28 + 10.2791)/2.0 + 1 = 20.1395
Lower limit is -300 = Q(9)
Upper limit is 0 = Q(20)
-300 < 0 < 0 indicating no trend in data.

Sen's Slope Analysis

Parameter: DRO
Location: RW-303-13

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
1800 (10/1/2008)	3400 (10/1/2006)	(1800 - 3400)/(2 - 1)	-1600
200 (10/1/2009)	3400 (10/1/2006)	(200 - 3400)/(3 - 1)	-1600
2100 (10/1/2010)	3400 (10/1/2006)	(2100 - 3400)/(4 - 1)	-433.333
2300 (10/1/2011)	3400 (10/1/2006)	(2300 - 3400)/(5 - 1)	-275
56 (10/1/2012)	3400 (10/1/2006)	(56 - 3400)/(6 - 1)	-668.8
430 (10/1/2013)	3400 (10/1/2006)	(430 - 3400)/(7 - 1)	-495
200 (10/1/2009)	1800 (10/1/2008)	(200 - 1800)/(3 - 2)	-1600
2100 (10/1/2010)	1800 (10/1/2008)	(2100 - 1800)/(4 - 2)	150
2300 (10/1/2011)	1800 (10/1/2008)	(2300 - 1800)/(5 - 2)	166.667
56 (10/1/2012)	1800 (10/1/2008)	(56 - 1800)/(6 - 2)	-436
430 (10/1/2013)	1800 (10/1/2008)	(430 - 1800)/(7 - 2)	-274
2100 (10/1/2010)	200 (10/1/2009)	(2100 - 200)/(4 - 3)	1900
2300 (10/1/2011)	200 (10/1/2009)	(2300 - 200)/(5 - 3)	1050
56 (10/1/2012)	200 (10/1/2009)	(56 - 200)/(6 - 3)	-48
430 (10/1/2013)	200 (10/1/2009)	(430 - 200)/(7 - 3)	57.5
2300 (10/1/2011)	2100 (10/1/2010)	(2300 - 2100)/(5 - 4)	200
56 (10/1/2012)	2100 (10/1/2010)	(56 - 2100)/(6 - 4)	-1022
430 (10/1/2013)	2100 (10/1/2010)	(430 - 2100)/(7 - 4)	-556.667
56 (10/1/2012)	2300 (10/1/2011)	(56 - 2300)/(6 - 5)	-2244
430 (10/1/2013)	2300 (10/1/2011)	(430 - 2300)/(7 - 5)	-935
430 (10/1/2013)	56 (10/1/2012)	(430 - 56)/(7 - 6)	374

Number of Q values = 21

Ordered Q Values

n	Q
1	-2244
2	-1600
3	-1600
4	-1600
5	-1022
6	-935
7	-668.8
8	-556.667
9	-495
10	-436
11	-433.333
12	-275
13	-274
14	-48
15	57.5

16	150
17	166.667
18	200
19	374
20	1050
21	1900

Sen's Estimator (Median Q) is -433.333

Time Period	Observations
10/1/2006	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0
a = 798
b = 1890
c = 84
Group Variance = 44.3333
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 8.53299
M1 = (21 - 8.53299)/2.0 = 6.23351
M2 = (21 + 8.53299)/2.0 + 1 = 15.7665
Lower limit is -935 = Q(6)
Upper limit is 150 = Q(16)
-935 < 0 < 150 indicating no trend in data.

Sen's Slope Analysis

Parameter: GRO
Location: 02-461

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
14000 (10/1/2007)	9900 (10/1/2006)	(14000 - 9900)/(2 - 1)	4100
8600 (10/1/2008)	9900 (10/1/2006)	(8600 - 9900)/(3 - 1)	-650
10000 (10/1/2009)	9900 (10/1/2006)	(10000 - 9900)/(4 - 1)	33.3333
9500 (10/1/2010)	9900 (10/1/2006)	(9500 - 9900)/(5 - 1)	-100
14000 (10/1/2011)	9900 (10/1/2006)	(14000 - 9900)/(6 - 1)	820
7800 (10/1/2012)	9900 (10/1/2006)	(7800 - 9900)/(7 - 1)	-350
7000 (10/1/2013)	9900 (10/1/2006)	(7000 - 9900)/(8 - 1)	-414.286
8600 (10/1/2008)	14000 (10/1/2007)	(8600 - 14000)/(3 - 2)	-5400
10000 (10/1/2009)	14000 (10/1/2007)	(10000 - 14000)/(4 - 2)	-2000
9500 (10/1/2010)	14000 (10/1/2007)	(9500 - 14000)/(5 - 2)	-1500
14000 (10/1/2011)	14000 (10/1/2007)	(14000 - 14000)/(6 - 2)	0
7800 (10/1/2012)	14000 (10/1/2007)	(7800 - 14000)/(7 - 2)	-1240
7000 (10/1/2013)	14000 (10/1/2007)	(7000 - 14000)/(8 - 2)	-1166.67
10000 (10/1/2009)	8600 (10/1/2008)	(10000 - 8600)/(4 - 3)	1400
9500 (10/1/2010)	8600 (10/1/2008)	(9500 - 8600)/(5 - 3)	450
14000 (10/1/2011)	8600 (10/1/2008)	(14000 - 8600)/(6 - 3)	1800
7800 (10/1/2012)	8600 (10/1/2008)	(7800 - 8600)/(7 - 3)	-200
7000 (10/1/2013)	8600 (10/1/2008)	(7000 - 8600)/(8 - 3)	-320
9500 (10/1/2010)	10000 (10/1/2009)	(9500 - 10000)/(5 - 4)	-500
14000 (10/1/2011)	10000 (10/1/2009)	(14000 - 10000)/(6 - 4)	2000
7800 (10/1/2012)	10000 (10/1/2009)	(7800 - 10000)/(7 - 4)	-733.333
7000 (10/1/2013)	10000 (10/1/2009)	(7000 - 10000)/(8 - 4)	-750
14000 (10/1/2011)	9500 (10/1/2010)	(14000 - 9500)/(6 - 5)	4500
7800 (10/1/2012)	9500 (10/1/2010)	(7800 - 9500)/(7 - 5)	-850
7000 (10/1/2013)	9500 (10/1/2010)	(7000 - 9500)/(8 - 5)	-833.333
7800 (10/1/2012)	14000 (10/1/2011)	(7800 - 14000)/(7 - 6)	-6200
7000 (10/1/2013)	14000 (10/1/2011)	(7000 - 14000)/(8 - 6)	-3500
7000 (10/1/2013)	7800 (10/1/2012)	(7000 - 7800)/(8 - 7)	-800

Number of Q values = 28

Ordered Q Values

n	Q
1	-6200
2	-5400
3	-3500
4	-2000
5	-1500
6	-1240
7	-1166.67

8	-850
9	-833.333
10	-800
11	-750
12	-733.333
13	-650
14	-500
15	-414.286
16	-350
17	-320
18	-200
19	-100
20	0
21	33.3333
22	450
23	820
24	1400
25	1800
26	2000
27	4100
28	4500

Sen's Estimator (Median Q) is -457.143

Tied Group	Value	Members
1	14000	2

Time Period	Observations
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 1176
b = 3024
c = 112
Group Variance = 64.3333
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 10.2791
M1 = (28 - 10.2791)/2.0 = 8.86046
M2 = (28 + 10.2791)/2.0 + 1 = 20.1395
Lower limit is -833.333 = Q(9)
Upper limit is 0 = Q(20)
-833.333 < 0 < 0 indicating no trend in data.

Sen's Slope Analysis
Parameter: GRO
Location: 04-100
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
5300 J (10/1/2004)	1600 (10/1/2003)	(5300 - 1600)/(2 - 1)	3700
4420 J (10/1/2005)	1600 (10/1/2003)	(4420 - 1600)/(3 - 1)	1410
5200 J (10/1/2006)	1600 (10/1/2003)	(5200 - 1600)/(4 - 1)	1200
4400 Y (10/1/2007)	1600 (10/1/2003)	(4400 - 1600)/(5 - 1)	700
4000 Z (10/1/2008)	1600 (10/1/2003)	(4000 - 1600)/(6 - 1)	480
4400 Z (10/1/2009)	1600 (10/1/2003)	(4400 - 1600)/(7 - 1)	466.667
3100 Y (10/1/2010)	1600 (10/1/2003)	(3100 - 1600)/(8 - 1)	214.286
2900 Y (10/1/2011)	1600 (10/1/2003)	(2900 - 1600)/(9 - 1)	162.5
3800 Y (10/1/2012)	1600 (10/1/2003)	(3800 - 1600)/(10 - 1)	244.444
2900 Y (10/1/2013)	1600 (10/1/2003)	(2900 - 1600)/(11 - 1)	130
4420 J (10/1/2005)	5300 J (10/1/2004)	(4420 - 5300)/(3 - 2)	-880
5200 J (10/1/2006)	5300 J (10/1/2004)	(5200 - 5300)/(4 - 2)	-50
4400 Y (10/1/2007)	5300 J (10/1/2004)	(4400 - 5300)/(5 - 2)	-300
4000 Z (10/1/2008)	5300 J (10/1/2004)	(4000 - 5300)/(6 - 2)	-325
4400 Z (10/1/2009)	5300 J (10/1/2004)	(4400 - 5300)/(7 - 2)	-180
3100 Y (10/1/2010)	5300 J (10/1/2004)	(3100 - 5300)/(8 - 2)	-366.667
2900 Y (10/1/2011)	5300 J (10/1/2004)	(2900 - 5300)/(9 - 2)	-342.857
3800 Y (10/1/2012)	5300 J (10/1/2004)	(3800 - 5300)/(10 - 2)	-187.5
2900 Y (10/1/2013)	5300 J (10/1/2004)	(2900 - 5300)/(11 - 2)	-266.667
5200 J (10/1/2006)	4420 J (10/1/2005)	(5200 - 4420)/(4 - 3)	780
4400 Y (10/1/2007)	4420 J (10/1/2005)	(4400 - 4420)/(5 - 3)	-10
4000 Z (10/1/2008)	4420 J (10/1/2005)	(4000 - 4420)/(6 - 3)	-140
4400 Z (10/1/2009)	4420 J (10/1/2005)	(4400 - 4420)/(7 - 3)	-5
3100 Y (10/1/2010)	4420 J (10/1/2005)	(3100 - 4420)/(8 - 3)	-264
2900 Y (10/1/2011)	4420 J (10/1/2005)	(2900 - 4420)/(9 - 3)	-253.333
3800 Y (10/1/2012)	4420 J (10/1/2005)	(3800 - 4420)/(10 - 3)	-88.5714
2900 Y (10/1/2013)	4420 J (10/1/2005)	(2900 - 4420)/(11 - 3)	-190
4400 Y (10/1/2007)	5200 J (10/1/2006)	(4400 - 5200)/(5 - 4)	-800
4000 Z (10/1/2008)	5200 J (10/1/2006)	(4000 - 5200)/(6 - 4)	-600
4400 Z (10/1/2009)	5200 J (10/1/2006)	(4400 - 5200)/(7 - 4)	-266.667
3100 Y (10/1/2010)	5200 J (10/1/2006)	(3100 - 5200)/(8 - 4)	-525
2900 Y (10/1/2011)	5200 J (10/1/2006)	(2900 - 5200)/(9 - 4)	-460
3800 Y (10/1/2012)	5200 J (10/1/2006)	(3800 - 5200)/(10 - 4)	-233.333
2900 Y (10/1/2013)	5200 J (10/1/2006)	(2900 - 5200)/(11 - 4)	-328.571
4000 Z (10/1/2008)	4400 Y (10/1/2007)	(4000 - 4400)/(6 - 5)	-400
4400 Z (10/1/2009)	4400 Y (10/1/2007)	(4400 - 4400)/(7 - 5)	0
3100 Y (10/1/2010)	4400 Y (10/1/2007)	(3100 - 4400)/(8 - 5)	-433.333
2900 Y (10/1/2011)	4400 Y (10/1/2007)	(2900 - 4400)/(9 - 5)	-375
3800 Y (10/1/2012)	4400 Y (10/1/2007)	(3800 - 4400)/(10 - 5)	-120
2900 Y (10/1/2013)	4400 Y (10/1/2007)	(2900 - 4400)/(11 - 5)	-250
4400 Z (10/1/2009)	4000 Z (10/1/2008)	(4400 - 4000)/(7 - 6)	400
3100 Y (10/1/2010)	4000 Z (10/1/2008)	(3100 - 4000)/(8 - 6)	-450
2900 Y (10/1/2011)	4000 Z (10/1/2008)	(2900 - 4000)/(9 - 6)	-366.667

3800 Y (10/1/2012)	4000 Z (10/1/2008)	(3800 - 4000)/(10 - 6)	-50
2900 Y (10/1/2013)	4000 Z (10/1/2008)	(2900 - 4000)/(11 - 6)	-220
3100 Y (10/1/2010)	4400 Z (10/1/2009)	(3100 - 4400)/(8 - 7)	-1300
2900 Y (10/1/2011)	4400 Z (10/1/2009)	(2900 - 4400)/(9 - 7)	-750
3800 Y (10/1/2012)	4400 Z (10/1/2009)	(3800 - 4400)/(10 - 7)	-200
2900 Y (10/1/2013)	4400 Z (10/1/2009)	(2900 - 4400)/(11 - 7)	-375
2900 Y (10/1/2011)	3100 Y (10/1/2010)	(2900 - 3100)/(9 - 8)	-200
3800 Y (10/1/2012)	3100 Y (10/1/2010)	(3800 - 3100)/(10 - 8)	350
2900 Y (10/1/2013)	3100 Y (10/1/2010)	(2900 - 3100)/(11 - 8)	-66.6667
3800 Y (10/1/2012)	2900 Y (10/1/2011)	(3800 - 2900)/(10 - 9)	900
2900 Y (10/1/2013)	2900 Y (10/1/2011)	(2900 - 2900)/(11 - 9)	0
2900 Y (10/1/2013)	3800 Y (10/1/2012)	(2900 - 3800)/(11 - 10)	-900

Number of Q values = 55

Ordered Q Values

n	Q
1	-1300
2	-900
3	-880
4	-800
5	-750
6	-600
7	-525
8	-460
9	-450
10	-433.333
11	-400
12	-375
13	-375
14	-366.667
15	-366.667
16	-342.857
17	-328.571
18	-325
19	-300
20	-266.667
21	-266.667
22	-264
23	-253.333
24	-250
25	-233.333
26	-220
27	-200
28	-200
29	-190
30	-187.5
31	-180
32	-140
33	-120
34	-88.5714
35	-66.6667

36	-50
37	-50
38	-10
39	-5
40	0
41	0
42	130
43	162.5
44	214.286
45	244.444
46	350
47	400
48	466.667
49	480
50	700
51	780
52	900
53	1200
54	1410
55	3700

Sen's Estimator (Median Q) is -200

Tied Group	Value	Members
1	4400	2
2	2900	2

Time Period	Observations
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 36
B = 0
C = 0
D = 0
E = 4
F = 0
a = 2970
b = 8910
c = 220
Group Variance = 163
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 16.3617
M1 = (55 - 16.3617)/2.0 = 19.3191
M2 = (55 + 16.3617)/2.0 + 1 = 36.6809
Lower limit is -300 = Q(19)
Upper limit is -50 = Q(37)
-50 < 0 indicating a downward trend in data.

Sen's Slope Analysis

Parameter: GRO
Location: 04-213

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
5900 Y (10/1/2007)	3800 J (10/1/2006)	(5900 - 3800)/(2 - 1)	2100
6900 Z (10/1/2008)	3800 J (10/1/2006)	(6900 - 3800)/(3 - 1)	1550
4400 Z (10/1/2009)	3800 J (10/1/2006)	(4400 - 3800)/(4 - 1)	200
3300 Y (10/1/2010)	3800 J (10/1/2006)	(3300 - 3800)/(5 - 1)	-125
4000 Y (10/1/2011)	3800 J (10/1/2006)	(4000 - 3800)/(6 - 1)	40
3900 Y (10/1/2012)	3800 J (10/1/2006)	(3900 - 3800)/(7 - 1)	16.6667
3200 Y (10/1/2013)	3800 J (10/1/2006)	(3200 - 3800)/(8 - 1)	-85.7143
6900 Z (10/1/2008)	5900 Y (10/1/2007)	(6900 - 5900)/(3 - 2)	1000
4400 Z (10/1/2009)	5900 Y (10/1/2007)	(4400 - 5900)/(4 - 2)	-750
3300 Y (10/1/2010)	5900 Y (10/1/2007)	(3300 - 5900)/(5 - 2)	-866.667
4000 Y (10/1/2011)	5900 Y (10/1/2007)	(4000 - 5900)/(6 - 2)	-475
3900 Y (10/1/2012)	5900 Y (10/1/2007)	(3900 - 5900)/(7 - 2)	-400
3200 Y (10/1/2013)	5900 Y (10/1/2007)	(3200 - 5900)/(8 - 2)	-450
4400 Z (10/1/2009)	6900 Z (10/1/2008)	(4400 - 6900)/(4 - 3)	-2500
3300 Y (10/1/2010)	6900 Z (10/1/2008)	(3300 - 6900)/(5 - 3)	-1800
4000 Y (10/1/2011)	6900 Z (10/1/2008)	(4000 - 6900)/(6 - 3)	-966.667
3900 Y (10/1/2012)	6900 Z (10/1/2008)	(3900 - 6900)/(7 - 3)	-750
3200 Y (10/1/2013)	6900 Z (10/1/2008)	(3200 - 6900)/(8 - 3)	-740
3300 Y (10/1/2010)	4400 Z (10/1/2009)	(3300 - 4400)/(5 - 4)	-1100
4000 Y (10/1/2011)	4400 Z (10/1/2009)	(4000 - 4400)/(6 - 4)	-200
3900 Y (10/1/2012)	4400 Z (10/1/2009)	(3900 - 4400)/(7 - 4)	-166.667
3200 Y (10/1/2013)	4400 Z (10/1/2009)	(3200 - 4400)/(8 - 4)	-300
4000 Y (10/1/2011)	3300 Y (10/1/2010)	(4000 - 3300)/(6 - 5)	700
3900 Y (10/1/2012)	3300 Y (10/1/2010)	(3900 - 3300)/(7 - 5)	300
3200 Y (10/1/2013)	3300 Y (10/1/2010)	(3200 - 3300)/(8 - 5)	-33.3333
3900 Y (10/1/2012)	4000 Y (10/1/2011)	(3900 - 4000)/(7 - 6)	-100
3200 Y (10/1/2013)	4000 Y (10/1/2011)	(3200 - 4000)/(8 - 6)	-400
3200 Y (10/1/2013)	3900 Y (10/1/2012)	(3200 - 3900)/(8 - 7)	-700

Number of Q values = 28

Ordered Q Values

n	Q
1	-2500
2	-1800
3	-1100
4	-966.667
5	-866.667
6	-750
7	-750

8	-740
9	-700
10	-475
11	-450
12	-400
13	-400
14	-300
15	-200
16	-166.667
17	-125
18	-100
19	-85.7143
20	-33.3333
21	16.6667
22	40
23	200
24	300
25	700
26	1000
27	1550
28	2100

Sen's Estimator (Median Q) is -250

Time Period	**Observations**
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0
a = 1176
b = 3024
c = 112
Group Variance = 65.3333
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 10.3587
M1 = (28 - 10.3587)/2.0 = 8.82067
M2 = (28 + 10.3587)/2.0 + 1 = 20.1793
Lower limit is -700 = Q(9)
Upper limit is -33.3333 = Q(20)
-33.3333 < 0 indicating a downward trend in data.

Sen's Slope Analysis

Parameter: GRO
Location: E-201

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
13000 (10/1/2007)	14000 (10/1/2006)	(13000 - 14000)/(2 - 1)	-1000
9400 (10/1/2008)	14000 (10/1/2006)	(9400 - 14000)/(3 - 1)	-2300
11000 (10/1/2009)	14000 (10/1/2006)	(11000 - 14000)/(4 - 1)	-1000
13000 (10/1/2010)	14000 (10/1/2006)	(13000 - 14000)/(5 - 1)	-250
17000 (10/1/2011)	14000 (10/1/2006)	(17000 - 14000)/(6 - 1)	600
9900 (10/1/2012)	14000 (10/1/2006)	(9900 - 14000)/(7 - 1)	-683.333
7900 (10/1/2013)	14000 (10/1/2006)	(7900 - 14000)/(8 - 1)	-871.429
9400 (10/1/2008)	13000 (10/1/2007)	(9400 - 13000)/(3 - 2)	-3600
11000 (10/1/2009)	13000 (10/1/2007)	(11000 - 13000)/(4 - 2)	-1000
13000 (10/1/2010)	13000 (10/1/2007)	(13000 - 13000)/(5 - 2)	0
17000 (10/1/2011)	13000 (10/1/2007)	(17000 - 13000)/(6 - 2)	1000
9900 (10/1/2012)	13000 (10/1/2007)	(9900 - 13000)/(7 - 2)	-620
7900 (10/1/2013)	13000 (10/1/2007)	(7900 - 13000)/(8 - 2)	-850
11000 (10/1/2009)	9400 (10/1/2008)	(11000 - 9400)/(4 - 3)	1600
13000 (10/1/2010)	9400 (10/1/2008)	(13000 - 9400)/(5 - 3)	1800
17000 (10/1/2011)	9400 (10/1/2008)	(17000 - 9400)/(6 - 3)	2533.33
9900 (10/1/2012)	9400 (10/1/2008)	(9900 - 9400)/(7 - 3)	125
7900 (10/1/2013)	9400 (10/1/2008)	(7900 - 9400)/(8 - 3)	-300
13000 (10/1/2010)	11000 (10/1/2009)	(13000 - 11000)/(5 - 4)	2000
17000 (10/1/2011)	11000 (10/1/2009)	(17000 - 11000)/(6 - 4)	3000
9900 (10/1/2012)	11000 (10/1/2009)	(9900 - 11000)/(7 - 4)	-366.667
7900 (10/1/2013)	11000 (10/1/2009)	(7900 - 11000)/(8 - 4)	-775
17000 (10/1/2011)	13000 (10/1/2010)	(17000 - 13000)/(6 - 5)	4000
9900 (10/1/2012)	13000 (10/1/2010)	(9900 - 13000)/(7 - 5)	-1550
7900 (10/1/2013)	13000 (10/1/2010)	(7900 - 13000)/(8 - 5)	-1700
9900 (10/1/2012)	17000 (10/1/2011)	(9900 - 17000)/(7 - 6)	-7100
7900 (10/1/2013)	17000 (10/1/2011)	(7900 - 17000)/(8 - 6)	-4550
7900 (10/1/2013)	9900 (10/1/2012)	(7900 - 9900)/(8 - 7)	-2000

Number of Q values = 28

Ordered Q Values

n	Q
1	-7100
2	-4550
3	-3600
4	-2300
5	-2000
6	-1700
7	-1550

8	-1000
9	-1000
10	-1000
11	-871.429
12	-850
13	-775
14	-683.333
15	-620
16	-366.667
17	-300
18	-250
19	0
20	125
21	600
22	1000
23	1600
24	1800
25	2000
26	2533.33
27	3000
28	4000

Sen's Estimator (Median Q) is -651.667

Tied Group	Value	Members
1	13000	2

Time Period	Observations
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 1176
b = 3024
c = 112
Group Variance = 64.3333
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 10.2791
M1 = (28 - 10.2791)/2.0 = 8.86046
M2 = (28 + 10.2791)/2.0 + 1 = 20.1395
Lower limit is -1000 = Q(9)
Upper limit is 125 = Q(20)
-1000 < 0 < 125 indicating no trend in data.

Sen's Slope Analysis
Parameter: GRO
Location: MW14-5
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
12000 (10/1/2002)	15900 (10/1/2001)	(12000 - 15900)/(2 - 1)	-3900
13000 (10/1/2003)	15900 (10/1/2001)	(13000 - 15900)/(3 - 1)	-1450
16100 J (10/1/2004)	15900 (10/1/2001)	(16100 - 15900)/(4 - 1)	66.6667
12600 J (10/1/2005)	15900 (10/1/2001)	(12600 - 15900)/(5 - 1)	-825
9900 (10/1/2006)	15900 (10/1/2001)	(9900 - 15900)/(6 - 1)	-1200
14000 DY (10/1/2007)	15900 (10/1/2001)	(14000 - 15900)/(7 - 1)	-316.667
11000 DY (10/1/2008)	15900 (10/1/2001)	(11000 - 15900)/(8 - 1)	-700
15000 DY (10/1/2009)	15900 (10/1/2001)	(15000 - 15900)/(9 - 1)	-112.5
9000 DY (10/1/2010)	15900 (10/1/2001)	(9000 - 15900)/(10 - 1)	-766.667
11000 DY (10/1/2011)	15900 (10/1/2001)	(11000 - 15900)/(11 - 1)	-490
7000 Y (10/1/2012)	15900 (10/1/2001)	(7000 - 15900)/(12 - 1)	-809.091
4700 Y (10/1/2013)	15900 (10/1/2001)	(4700 - 15900)/(13 - 1)	-933.333
13000 (10/1/2003)	12000 (10/1/2002)	(13000 - 12000)/(3 - 2)	1000
16100 J (10/1/2004)	12000 (10/1/2002)	(16100 - 12000)/(4 - 2)	2050
12600 J (10/1/2005)	12000 (10/1/2002)	(12600 - 12000)/(5 - 2)	200
9900 (10/1/2006)	12000 (10/1/2002)	(9900 - 12000)/(6 - 2)	-525
14000 DY (10/1/2007)	12000 (10/1/2002)	(14000 - 12000)/(7 - 2)	400
11000 DY (10/1/2008)	12000 (10/1/2002)	(11000 - 12000)/(8 - 2)	-166.667
15000 DY (10/1/2009)	12000 (10/1/2002)	(15000 - 12000)/(9 - 2)	428.571
9000 DY (10/1/2010)	12000 (10/1/2002)	(9000 - 12000)/(10 - 2)	-375
11000 DY (10/1/2011)	12000 (10/1/2002)	(11000 - 12000)/(11 - 2)	-111.111
7000 Y (10/1/2012)	12000 (10/1/2002)	(7000 - 12000)/(12 - 2)	-500
4700 Y (10/1/2013)	12000 (10/1/2002)	(4700 - 12000)/(13 - 2)	-663.636
16100 J (10/1/2004)	13000 (10/1/2003)	(16100 - 13000)/(4 - 3)	3100
12600 J (10/1/2005)	13000 (10/1/2003)	(12600 - 13000)/(5 - 3)	-200
9900 (10/1/2006)	13000 (10/1/2003)	(9900 - 13000)/(6 - 3)	-1033.33
14000 DY (10/1/2007)	13000 (10/1/2003)	(14000 - 13000)/(7 - 3)	250
11000 DY (10/1/2008)	13000 (10/1/2003)	(11000 - 13000)/(8 - 3)	-400
15000 DY (10/1/2009)	13000 (10/1/2003)	(15000 - 13000)/(9 - 3)	333.333
9000 DY (10/1/2010)	13000 (10/1/2003)	(9000 - 13000)/(10 - 3)	-571.429
11000 DY (10/1/2011)	13000 (10/1/2003)	(11000 - 13000)/(11 - 3)	-250
7000 Y (10/1/2012)	13000 (10/1/2003)	(7000 - 13000)/(12 - 3)	-666.667
4700 Y (10/1/2013)	13000 (10/1/2003)	(4700 - 13000)/(13 - 3)	-830
12600 J (10/1/2005)	16100 J (10/1/2004)	(12600 - 16100)/(5 - 4)	-3500
9900 (10/1/2006)	16100 J (10/1/2004)	(9900 - 16100)/(6 - 4)	-3100
14000 DY (10/1/2007)	16100 J (10/1/2004)	(14000 - 16100)/(7 - 4)	-700
11000 DY (10/1/2008)	16100 J (10/1/2004)	(11000 - 16100)/(8 - 4)	-1275
15000 DY (10/1/2009)	16100 J (10/1/2004)	(15000 - 16100)/(9 - 4)	-220
9000 DY (10/1/2010)	16100 J (10/1/2004)	(9000 - 16100)/(10 - 4)	-1183.33
11000 DY (10/1/2011)	16100 J (10/1/2004)	(11000 - 16100)/(11 - 4)	-728.571
7000 Y (10/1/2012)	16100 J (10/1/2004)	(7000 - 16100)/(12 - 4)	-1137.5
4700 Y (10/1/2013)	16100 J (10/1/2004)	(4700 - 16100)/(13 - 4)	-1266.67
9900 (10/1/2006)	12600 J (10/1/2005)	(9900 - 12600)/(6 - 5)	-2700
14000 DY (10/1/2007)	12600 J (10/1/2005)	(14000 - 12600)/(7 - 5)	700

11000 DY (10/1/2008)	12600 J (10/1/2005)	(11000 - 12600)/(8 - 5)	-533.333
15000 DY (10/1/2009)	12600 J (10/1/2005)	(15000 - 12600)/(9 - 5)	600
9000 DY (10/1/2010)	12600 J (10/1/2005)	(9000 - 12600)/(10 - 5)	-720
11000 DY (10/1/2011)	12600 J (10/1/2005)	(11000 - 12600)/(11 - 5)	-266.667
7000 Y (10/1/2012)	12600 J (10/1/2005)	(7000 - 12600)/(12 - 5)	-800
4700 Y (10/1/2013)	12600 J (10/1/2005)	(4700 - 12600)/(13 - 5)	-987.5
14000 DY (10/1/2007)	9900 (10/1/2006)	(14000 - 9900)/(7 - 6)	4100
11000 DY (10/1/2008)	9900 (10/1/2006)	(11000 - 9900)/(8 - 6)	550
15000 DY (10/1/2009)	9900 (10/1/2006)	(15000 - 9900)/(9 - 6)	1700
9000 DY (10/1/2010)	9900 (10/1/2006)	(9000 - 9900)/(10 - 6)	-225
11000 DY (10/1/2011)	9900 (10/1/2006)	(11000 - 9900)/(11 - 6)	220
7000 Y (10/1/2012)	9900 (10/1/2006)	(7000 - 9900)/(12 - 6)	-483.333
4700 Y (10/1/2013)	9900 (10/1/2006)	(4700 - 9900)/(13 - 6)	-742.857
11000 DY (10/1/2008)	14000 DY (10/1/2007)	(11000 - 14000)/(8 - 7)	-3000
15000 DY (10/1/2009)	14000 DY (10/1/2007)	(15000 - 14000)/(9 - 7)	500
9000 DY (10/1/2010)	14000 DY (10/1/2007)	(9000 - 14000)/(10 - 7)	-1666.67
11000 DY (10/1/2011)	14000 DY (10/1/2007)	(11000 - 14000)/(11 - 7)	-750
7000 Y (10/1/2012)	14000 DY (10/1/2007)	(7000 - 14000)/(12 - 7)	-1400
4700 Y (10/1/2013)	14000 DY (10/1/2007)	(4700 - 14000)/(13 - 7)	-1550
15000 DY (10/1/2009)	11000 DY (10/1/2008)	(15000 - 11000)/(9 - 8)	4000
9000 DY (10/1/2010)	11000 DY (10/1/2008)	(9000 - 11000)/(10 - 8)	-1000
11000 DY (10/1/2011)	11000 DY (10/1/2008)	(11000 - 11000)/(11 - 8)	0
7000 Y (10/1/2012)	11000 DY (10/1/2008)	(7000 - 11000)/(12 - 8)	-1000
4700 Y (10/1/2013)	11000 DY (10/1/2008)	(4700 - 11000)/(13 - 8)	-1260
9000 DY (10/1/2010)	15000 DY (10/1/2009)	(9000 - 15000)/(10 - 9)	-6000
11000 DY (10/1/2011)	15000 DY (10/1/2009)	(11000 - 15000)/(11 - 9)	-2000
7000 Y (10/1/2012)	15000 DY (10/1/2009)	(7000 - 15000)/(12 - 9)	-2666.67
4700 Y (10/1/2013)	15000 DY (10/1/2009)	(4700 - 15000)/(13 - 9)	-2575
11000 DY (10/1/2011)	9000 DY (10/1/2010)	(11000 - 9000)/(11 - 10)	2000
7000 Y (10/1/2012)	9000 DY (10/1/2010)	(7000 - 9000)/(12 - 10)	-1000
4700 Y (10/1/2013)	9000 DY (10/1/2010)	(4700 - 9000)/(13 - 10)	-1433.33
7000 Y (10/1/2012)	11000 DY (10/1/2011)	(7000 - 11000)/(12 - 11)	-4000
4700 Y (10/1/2013)	11000 DY (10/1/2011)	(4700 - 11000)/(13 - 11)	-3150
4700 Y (10/1/2013)	7000 Y (10/1/2012)	(4700 - 7000)/(13 - 12)	-2300

Number of Q values = 78

Ordered Q Values

n	Q
1	-6000
2	-4000
3	-3900
4	-3500
5	-3150
6	-3100
7	-3000
8	-2700
9	-2666.67
10	-2575

11	-2300
12	-2000
13	-1666.67
14	-1550
15	-1450
16	-1433.33
17	-1400
18	-1275
19	-1266.67
20	-1260
21	-1200
22	-1183.33
23	-1137.5
24	-1033.33
25	-1000
26	-1000
27	-1000
28	-987.5
29	-933.333
30	-830
31	-825
32	-809.091
33	-800
34	-766.667
35	-750
36	-742.857
37	-728.571
38	-720
39	-700
40	-700
41	-666.667
42	-663.636
43	-571.429
44	-533.333
45	-525
46	-500
47	-490
48	-483.333
49	-400
50	-375
51	-316.667
52	-266.667
53	-250
54	-225
55	-220
56	-200
57	-166.667
58	-112.5
59	-111.111
60	0
61	66.6667
62	200
63	220
64	250
65	333.333
66	400
67	428.571

68	500
69	550
70	600
71	700
72	1000
73	1700
74	2000
75	2050
76	3100
77	4000
78	4100

Sen's Estimator (Median Q) is -700

Tied Group	Value	Members
1	11000	2

Time Period	Observations
10/1/2001	1
10/1/2002	1
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 4836
b = 15444
c = 312
Group Variance = 267.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 20.9668
M1 = (78 - 20.9668)/2.0 = 28.5166
M2 = (78 + 20.9668)/2.0 + 1 = 50.4834
Lower limit is -933.333 = Q(29)
Upper limit is -375 = Q(50)
-375 < 0 indicating a downward trend in data.

Sen's Slope Analysis
Parameter: GRO
Location: 14-113
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
6880 J (10/1/2004)	2000 (10/1/2003)	(6880 - 2000)/(2 - 1)	4880
3900 J (10/1/2005)	2000 (10/1/2003)	(3900 - 2000)/(3 - 1)	950
6300 (10/1/2006)	2000 (10/1/2003)	(6300 - 2000)/(4 - 1)	1433.33
3900 Z (10/1/2007)	2000 (10/1/2003)	(3900 - 2000)/(5 - 1)	475
2700 Z (10/1/2008)	2000 (10/1/2003)	(2700 - 2000)/(6 - 1)	140
5100 Z (10/1/2009)	2000 (10/1/2003)	(5100 - 2000)/(7 - 1)	516.667
3800 Y (10/1/2010)	2000 (10/1/2003)	(3800 - 2000)/(8 - 1)	257.143
3400 Y (10/1/2011)	2000 (10/1/2003)	(3400 - 2000)/(9 - 1)	175
2000 Y (10/1/2012)	2000 (10/1/2003)	(2000 - 2000)/(10 - 1)	0
2800 Z (10/1/2013)	2000 (10/1/2003)	(2800 - 2000)/(11 - 1)	80
3900 J (10/1/2005)	6880 J (10/1/2004)	(3900 - 6880)/(3 - 2)	-2980
6300 (10/1/2006)	6880 J (10/1/2004)	(6300 - 6880)/(4 - 2)	-290
3900 Z (10/1/2007)	6880 J (10/1/2004)	(3900 - 6880)/(5 - 2)	-993.333
2700 Z (10/1/2008)	6880 J (10/1/2004)	(2700 - 6880)/(6 - 2)	-1045
5100 Z (10/1/2009)	6880 J (10/1/2004)	(5100 - 6880)/(7 - 2)	-356
3800 Y (10/1/2010)	6880 J (10/1/2004)	(3800 - 6880)/(8 - 2)	-513.333
3400 Y (10/1/2011)	6880 J (10/1/2004)	(3400 - 6880)/(9 - 2)	-497.143
2000 Y (10/1/2012)	6880 J (10/1/2004)	(2000 - 6880)/(10 - 2)	-610
2800 Z (10/1/2013)	6880 J (10/1/2004)	(2800 - 6880)/(11 - 2)	-453.333
6300 (10/1/2006)	3900 J (10/1/2005)	(6300 - 3900)/(4 - 3)	2400
3900 Z (10/1/2007)	3900 J (10/1/2005)	(3900 - 3900)/(5 - 3)	0
2700 Z (10/1/2008)	3900 J (10/1/2005)	(2700 - 3900)/(6 - 3)	-400
5100 Z (10/1/2009)	3900 J (10/1/2005)	(5100 - 3900)/(7 - 3)	300
3800 Y (10/1/2010)	3900 J (10/1/2005)	(3800 - 3900)/(8 - 3)	-20
3400 Y (10/1/2011)	3900 J (10/1/2005)	(3400 - 3900)/(9 - 3)	-83.3333
2000 Y (10/1/2012)	3900 J (10/1/2005)	(2000 - 3900)/(10 - 3)	-271.429
2800 Z (10/1/2013)	3900 J (10/1/2005)	(2800 - 3900)/(11 - 3)	-137.5
3900 Z (10/1/2007)	6300 (10/1/2006)	(3900 - 6300)/(5 - 4)	-2400
2700 Z (10/1/2008)	6300 (10/1/2006)	(2700 - 6300)/(6 - 4)	-1800
5100 Z (10/1/2009)	6300 (10/1/2006)	(5100 - 6300)/(7 - 4)	-400
3800 Y (10/1/2010)	6300 (10/1/2006)	(3800 - 6300)/(8 - 4)	-625
3400 Y (10/1/2011)	6300 (10/1/2006)	(3400 - 6300)/(9 - 4)	-580
2000 Y (10/1/2012)	6300 (10/1/2006)	(2000 - 6300)/(10 - 4)	-716.667
2800 Z (10/1/2013)	6300 (10/1/2006)	(2800 - 6300)/(11 - 4)	-500
2700 Z (10/1/2008)	3900 Z (10/1/2007)	(2700 - 3900)/(6 - 5)	-1200
5100 Z (10/1/2009)	3900 Z (10/1/2007)	(5100 - 3900)/(7 - 5)	600
3800 Y (10/1/2010)	3900 Z (10/1/2007)	(3800 - 3900)/(8 - 5)	-33.3333
3400 Y (10/1/2011)	3900 Z (10/1/2007)	(3400 - 3900)/(9 - 5)	-125
2000 Y (10/1/2012)	3900 Z (10/1/2007)	(2000 - 3900)/(10 - 5)	-380
2800 Z (10/1/2013)	3900 Z (10/1/2007)	(2800 - 3900)/(11 - 5)	-183.333
5100 Z (10/1/2009)	2700 Z (10/1/2008)	(5100 - 2700)/(7 - 6)	2400
3800 Y (10/1/2010)	2700 Z (10/1/2008)	(3800 - 2700)/(8 - 6)	550
3400 Y (10/1/2011)	2700 Z (10/1/2008)	(3400 - 2700)/(9 - 6)	233.333

2000 Y (10/1/2012)	2700 Z (10/1/2008)	(2000 - 2700)/(10 - 6)	-175
2800 Z (10/1/2013)	2700 Z (10/1/2008)	(2800 - 2700)/(11 - 6)	20
3800 Y (10/1/2010)	5100 Z (10/1/2009)	(3800 - 5100)/(8 - 7)	-1300
3400 Y (10/1/2011)	5100 Z (10/1/2009)	(3400 - 5100)/(9 - 7)	-850
2000 Y (10/1/2012)	5100 Z (10/1/2009)	(2000 - 5100)/(10 - 7)	-1033.33
2800 Z (10/1/2013)	5100 Z (10/1/2009)	(2800 - 5100)/(11 - 7)	-575
3400 Y (10/1/2011)	3800 Y (10/1/2010)	(3400 - 3800)/(9 - 8)	-400
2000 Y (10/1/2012)	3800 Y (10/1/2010)	(2000 - 3800)/(10 - 8)	-900
2800 Z (10/1/2013)	3800 Y (10/1/2010)	(2800 - 3800)/(11 - 8)	-333.333
2000 Y (10/1/2012)	3400 Y (10/1/2011)	(2000 - 3400)/(10 - 9)	-1400
2800 Z (10/1/2013)	3400 Y (10/1/2011)	(2800 - 3400)/(11 - 9)	-300
2800 Z (10/1/2013)	2000 Y (10/1/2012)	(2800 - 2000)/(11 - 10)	800

Number of Q values = 55

Ordered Q Values

n	Q
1	-2980
2	-2400
3	-1800
4	-1400
5	-1300
6	-1200
7	-1045
8	-1033.33
9	-993.333
10	-900
11	-850
12	-716.667
13	-625
14	-610
15	-580
16	-575
17	-513.333
18	-500
19	-497.143
20	-453.333
21	-400
22	-400
23	-400
24	-380
25	-356
26	-333.333
27	-300
28	-290
29	-271.429
30	-183.333
31	-175
32	-137.5
33	-125
34	-83.3333
35	-33.3333

36	-20
37	0
38	0
39	20
40	80
41	140
42	175
43	233.333
44	257.143
45	300
46	475
47	516.667
48	550
49	600
50	800
51	950
52	1433.33
53	2400
54	2400
55	4880

Sen's Estimator (Median Q) is -290

Tied Group	Value	Members
1	2000	2
2	3900	2

Time Period	Observations
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 36
B = 0
C = 0
D = 0
E = 4
F = 0
a = 2970
b = 8910
c = 220
Group Variance = 163
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 16.3617
M1 = (55 - 16.3617)/2.0 = 19.3191
M2 = (55 + 16.3617)/2.0 + 1 = 36.6809
Lower limit is -497.143 = Q(19)
Upper limit is 0 = Q(37)
-497.143 < 0 < 0 indicating no trend in data.

Sen's Slope Analysis
Parameter: GRO
Location: 14-210
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
2300 (10/1/2002)	5900 (10/1/2001)	(2300 - 5900)/(2 - 1)	-3600
3300 (10/1/2003)	5900 (10/1/2001)	(3300 - 5900)/(3 - 1)	-1300
5220 J (10/1/2004)	5900 (10/1/2001)	(5220 - 5900)/(4 - 1)	-226.667
3560 (10/1/2005)	5900 (10/1/2001)	(3560 - 5900)/(5 - 1)	-585
3700 J (10/1/2006)	5900 (10/1/2001)	(3700 - 5900)/(6 - 1)	-440
3400 Y (10/1/2007)	5900 (10/1/2001)	(3400 - 5900)/(7 - 1)	-416.667
3800 Y (10/1/2008)	5900 (10/1/2001)	(3800 - 5900)/(8 - 1)	-300
4500 Y (10/1/2009)	5900 (10/1/2001)	(4500 - 5900)/(9 - 1)	-175
4200 Y (10/1/2010)	5900 (10/1/2001)	(4200 - 5900)/(10 - 1)	-188.889
1600 Y (10/1/2011)	5900 (10/1/2001)	(1600 - 5900)/(11 - 1)	-430
2400 Y (10/1/2012)	5900 (10/1/2001)	(2400 - 5900)/(12 - 1)	-318.182
3200 Z (10/1/2013)	5900 (10/1/2001)	(3200 - 5900)/(13 - 1)	-225
3300 (10/1/2003)	2300 (10/1/2002)	(3300 - 2300)/(3 - 2)	1000
5220 J (10/1/2004)	2300 (10/1/2002)	(5220 - 2300)/(4 - 2)	1460
3560 (10/1/2005)	2300 (10/1/2002)	(3560 - 2300)/(5 - 2)	420
3700 J (10/1/2006)	2300 (10/1/2002)	(3700 - 2300)/(6 - 2)	350
3400 Y (10/1/2007)	2300 (10/1/2002)	(3400 - 2300)/(7 - 2)	220
3800 Y (10/1/2008)	2300 (10/1/2002)	(3800 - 2300)/(8 - 2)	250
4500 Y (10/1/2009)	2300 (10/1/2002)	(4500 - 2300)/(9 - 2)	314.286
4200 Y (10/1/2010)	2300 (10/1/2002)	(4200 - 2300)/(10 - 2)	237.5
1600 Y (10/1/2011)	2300 (10/1/2002)	(1600 - 2300)/(11 - 2)	-77.7778
2400 Y (10/1/2012)	2300 (10/1/2002)	(2400 - 2300)/(12 - 2)	10
3200 Z (10/1/2013)	2300 (10/1/2002)	(3200 - 2300)/(13 - 2)	81.8182
5220 J (10/1/2004)	3300 (10/1/2003)	(5220 - 3300)/(4 - 3)	1920
3560 (10/1/2005)	3300 (10/1/2003)	(3560 - 3300)/(5 - 3)	130
3700 J (10/1/2006)	3300 (10/1/2003)	(3700 - 3300)/(6 - 3)	133.333
3400 Y (10/1/2007)	3300 (10/1/2003)	(3400 - 3300)/(7 - 3)	25
3800 Y (10/1/2008)	3300 (10/1/2003)	(3800 - 3300)/(8 - 3)	100
4500 Y (10/1/2009)	3300 (10/1/2003)	(4500 - 3300)/(9 - 3)	200
4200 Y (10/1/2010)	3300 (10/1/2003)	(4200 - 3300)/(10 - 3)	128.571
1600 Y (10/1/2011)	3300 (10/1/2003)	(1600 - 3300)/(11 - 3)	-212.5
2400 Y (10/1/2012)	3300 (10/1/2003)	(2400 - 3300)/(12 - 3)	-100
3200 Z (10/1/2013)	3300 (10/1/2003)	(3200 - 3300)/(13 - 3)	-10
3560 (10/1/2005)	5220 J (10/1/2004)	(3560 - 5220)/(5 - 4)	-1660
3700 J (10/1/2006)	5220 J (10/1/2004)	(3700 - 5220)/(6 - 4)	-760
3400 Y (10/1/2007)	5220 J (10/1/2004)	(3400 - 5220)/(7 - 4)	-606.667
3800 Y (10/1/2008)	5220 J (10/1/2004)	(3800 - 5220)/(8 - 4)	-355
4500 Y (10/1/2009)	5220 J (10/1/2004)	(4500 - 5220)/(9 - 4)	-144
4200 Y (10/1/2010)	5220 J (10/1/2004)	(4200 - 5220)/(10 - 4)	-170
1600 Y (10/1/2011)	5220 J (10/1/2004)	(1600 - 5220)/(11 - 4)	-517.143
2400 Y (10/1/2012)	5220 J (10/1/2004)	(2400 - 5220)/(12 - 4)	-352.5
3200 Z (10/1/2013)	5220 J (10/1/2004)	(3200 - 5220)/(13 - 4)	-224.444
3700 J (10/1/2006)	3560 (10/1/2005)	(3700 - 3560)/(6 - 5)	140
3400 Y (10/1/2007)	3560 (10/1/2005)	(3400 - 3560)/(7 - 5)	-80

3800 Y (10/1/2008)	3560 (10/1/2005)	(3800 - 3560)/(8 - 5)	80
4500 Y (10/1/2009)	3560 (10/1/2005)	(4500 - 3560)/(9 - 5)	235
4200 Y (10/1/2010)	3560 (10/1/2005)	(4200 - 3560)/(10 - 5)	128
1600 Y (10/1/2011)	3560 (10/1/2005)	(1600 - 3560)/(11 - 5)	-326.667
2400 Y (10/1/2012)	3560 (10/1/2005)	(2400 - 3560)/(12 - 5)	-165.714
3200 Z (10/1/2013)	3560 (10/1/2005)	(3200 - 3560)/(13 - 5)	-45
3400 Y (10/1/2007)	3700 J (10/1/2006)	(3400 - 3700)/(7 - 6)	-300
3800 Y (10/1/2008)	3700 J (10/1/2006)	(3800 - 3700)/(8 - 6)	50
4500 Y (10/1/2009)	3700 J (10/1/2006)	(4500 - 3700)/(9 - 6)	266.667
4200 Y (10/1/2010)	3700 J (10/1/2006)	(4200 - 3700)/(10 - 6)	125
1600 Y (10/1/2011)	3700 J (10/1/2006)	(1600 - 3700)/(11 - 6)	-420
2400 Y (10/1/2012)	3700 J (10/1/2006)	(2400 - 3700)/(12 - 6)	-216.667
3200 Z (10/1/2013)	3700 J (10/1/2006)	(3200 - 3700)/(13 - 6)	-71.4286
3800 Y (10/1/2008)	3400 Y (10/1/2007)	(3800 - 3400)/(8 - 7)	400
4500 Y (10/1/2009)	3400 Y (10/1/2007)	(4500 - 3400)/(9 - 7)	550
4200 Y (10/1/2010)	3400 Y (10/1/2007)	(4200 - 3400)/(10 - 7)	266.667
1600 Y (10/1/2011)	3400 Y (10/1/2007)	(1600 - 3400)/(11 - 7)	-450
2400 Y (10/1/2012)	3400 Y (10/1/2007)	(2400 - 3400)/(12 - 7)	-200
3200 Z (10/1/2013)	3400 Y (10/1/2007)	(3200 - 3400)/(13 - 7)	-33.3333
4500 Y (10/1/2009)	3800 Y (10/1/2008)	(4500 - 3800)/(9 - 8)	700
4200 Y (10/1/2010)	3800 Y (10/1/2008)	(4200 - 3800)/(10 - 8)	200
1600 Y (10/1/2011)	3800 Y (10/1/2008)	(1600 - 3800)/(11 - 8)	-733.333
2400 Y (10/1/2012)	3800 Y (10/1/2008)	(2400 - 3800)/(12 - 8)	-350
3200 Z (10/1/2013)	3800 Y (10/1/2008)	(3200 - 3800)/(13 - 8)	-120
4200 Y (10/1/2010)	4500 Y (10/1/2009)	(4200 - 4500)/(10 - 9)	-300
1600 Y (10/1/2011)	4500 Y (10/1/2009)	(1600 - 4500)/(11 - 9)	-1450
2400 Y (10/1/2012)	4500 Y (10/1/2009)	(2400 - 4500)/(12 - 9)	-700
3200 Z (10/1/2013)	4500 Y (10/1/2009)	(3200 - 4500)/(13 - 9)	-325
1600 Y (10/1/2011)	4200 Y (10/1/2010)	(1600 - 4200)/(11 - 10)	-2600
2400 Y (10/1/2012)	4200 Y (10/1/2010)	(2400 - 4200)/(12 - 10)	-900
3200 Z (10/1/2013)	4200 Y (10/1/2010)	(3200 - 4200)/(13 - 10)	-333.333
2400 Y (10/1/2012)	1600 Y (10/1/2011)	(2400 - 1600)/(12 - 11)	800
3200 Z (10/1/2013)	1600 Y (10/1/2011)	(3200 - 1600)/(13 - 11)	800
3200 Z (10/1/2013)	2400 Y (10/1/2012)	(3200 - 2400)/(13 - 12)	800

Number of Q values = 78

Ordered Q Values

n	Q
1	-3600
2	-2600
3	-1660
4	-1450
5	-1300
6	-900
7	-760
8	-733.333
9	-700
10	-606.667

11	-585
12	-517.143
13	-450
14	-440
15	-430
16	-420
17	-416.667
18	-355
19	-352.5
20	-350
21	-333.333
22	-326.667
23	-325
24	-318.182
25	-300
26	-300
27	-300
28	-226.667
29	-225
30	-224.444
31	-216.667
32	-212.5
33	-200
34	-188.889
35	-175
36	-170
37	-165.714
38	-144
39	-120
40	-100
41	-80
42	-77.7778
43	-71.4286
44	-45
45	-33.3333
46	-10
47	10
48	25
49	50
50	80
51	81.8182
52	100
53	125
54	128
55	128.571
56	130
57	133.333
58	140
59	200
60	200
61	220
62	235
63	237.5
64	250
65	266.667
66	266.667
67	314.286

68	350
69	400
70	420
71	550
72	700
73	800
74	800
75	800
76	1000
77	1460
78	1920

Sen's Estimator (Median Q) is -110

Time Period	Observations
10/1/2001	1
10/1/2002	1
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0
a = 4836
b = 15444
c = 312
Group Variance = 268.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 21.006
M1 = (78 - 21.006)/2.0 = 28.497
M2 = (78 + 21.006)/2.0 + 1 = 50.503
Lower limit is -226.667 = Q(28)
Upper limit is 81.8182 = Q(51)
-226.667 < 0 < 81.8182 indicating no trend in data.

Sen's Slope Analysis
Parameter: GRO
Location: 03-502
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
6700 DY (10/1/2007)	8200 (10/1/2006)	(6700 - 8200)/(2 - 1)	-1500
5300 Y (10/1/2008)	8200 (10/1/2006)	(5300 - 8200)/(3 - 1)	-1450
3600 Y (10/1/2009)	8200 (10/1/2006)	(3600 - 8200)/(4 - 1)	-1533.33
1500 Y (10/1/2010)	8200 (10/1/2006)	(1500 - 8200)/(5 - 1)	-1675
3200 Y (10/1/2011)	8200 (10/1/2006)	(3200 - 8200)/(6 - 1)	-1000
3400 Y (10/1/2012)	8200 (10/1/2006)	(3400 - 8200)/(7 - 1)	-800
3300 Y (10/1/2013)	8200 (10/1/2006)	(3300 - 8200)/(8 - 1)	-700
5300 Y (10/1/2008)	6700 DY (10/1/2007)	(5300 - 6700)/(3 - 2)	-1400
3600 Y (10/1/2009)	6700 DY (10/1/2007)	(3600 - 6700)/(4 - 2)	-1550
1500 Y (10/1/2010)	6700 DY (10/1/2007)	(1500 - 6700)/(5 - 2)	-1733.33
3200 Y (10/1/2011)	6700 DY (10/1/2007)	(3200 - 6700)/(6 - 2)	-875
3400 Y (10/1/2012)	6700 DY (10/1/2007)	(3400 - 6700)/(7 - 2)	-660
3300 Y (10/1/2013)	6700 DY (10/1/2007)	(3300 - 6700)/(8 - 2)	-566.667
3600 Y (10/1/2009)	5300 Y (10/1/2008)	(3600 - 5300)/(4 - 3)	-1700
1500 Y (10/1/2010)	5300 Y (10/1/2008)	(1500 - 5300)/(5 - 3)	-1900
3200 Y (10/1/2011)	5300 Y (10/1/2008)	(3200 - 5300)/(6 - 3)	-700
3400 Y (10/1/2012)	5300 Y (10/1/2008)	(3400 - 5300)/(7 - 3)	-475
3300 Y (10/1/2013)	5300 Y (10/1/2008)	(3300 - 5300)/(8 - 3)	-400
1500 Y (10/1/2010)	3600 Y (10/1/2009)	(1500 - 3600)/(5 - 4)	-2100
3200 Y (10/1/2011)	3600 Y (10/1/2009)	(3200 - 3600)/(6 - 4)	-200
3400 Y (10/1/2012)	3600 Y (10/1/2009)	(3400 - 3600)/(7 - 4)	-66.6667
3300 Y (10/1/2013)	3600 Y (10/1/2009)	(3300 - 3600)/(8 - 4)	-75
3200 Y (10/1/2011)	1500 Y (10/1/2010)	(3200 - 1500)/(6 - 5)	1700
3400 Y (10/1/2012)	1500 Y (10/1/2010)	(3400 - 1500)/(7 - 5)	950
3300 Y (10/1/2013)	1500 Y (10/1/2010)	(3300 - 1500)/(8 - 5)	600
3400 Y (10/1/2012)	3200 Y (10/1/2011)	(3400 - 3200)/(7 - 6)	200
3300 Y (10/1/2013)	3200 Y (10/1/2011)	(3300 - 3200)/(8 - 6)	50
3300 Y (10/1/2013)	3400 Y (10/1/2012)	(3300 - 3400)/(8 - 7)	-100

Number of Q values = 28

Ordered Q Values

n	Q
1	-2100
2	-1900
3	-1733.33
4	-1700
5	-1675
6	-1550
7	-1533.33

8	-1500
9	-1450
10	-1400
11	-1000
12	-875
13	-800
14	-700
15	-700
16	-660
17	-566.667
18	-475
19	-400
20	-200
21	-100
22	-75
23	-66.6667
24	50
25	200
26	600
27	950
28	1700

Sen's Estimator (Median Q) is -700

Time Period	Observations
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0
a = 1176
b = 3024
c = 112
Group Variance = 65.3333
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 10.3587
M1 = (28 - 10.3587)/2.0 = 8.82067
M2 = (28 + 10.3587)/2.0 + 1 = 20.1793
Lower limit is -1450 = Q(9)
Upper limit is -200 = Q(20)
-200 < 0 indicating a downward trend in data.

Sen's Slope Analysis

Parameter: PCE

Location: 55-145

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
130 (10/1/2002)	180 (10/1/2001)	(130 - 180)/(2 - 1)	-50
170 (10/1/2003)	180 (10/1/2001)	(170 - 180)/(3 - 1)	-5
112 (10/1/2004)	180 (10/1/2001)	(112 - 180)/(4 - 1)	-22.6667
90.3 (10/1/2005)	180 (10/1/2001)	(90.3 - 180)/(5 - 1)	-22.425
110 (10/1/2006)	180 (10/1/2001)	(110 - 180)/(6 - 1)	-14
71 (10/1/2007)	180 (10/1/2001)	(71 - 180)/(7 - 1)	-18.1667
61 (10/1/2008)	180 (10/1/2001)	(61 - 180)/(8 - 1)	-17
57 (10/1/2009)	180 (10/1/2001)	(57 - 180)/(9 - 1)	-15.375
49 (10/1/2010)	180 (10/1/2001)	(49 - 180)/(10 - 1)	-14.5556
39 (10/1/2011)	180 (10/1/2001)	(39 - 180)/(11 - 1)	-14.1
38 (10/1/2013)	180 (10/1/2001)	(38 - 180)/(12 - 1)	-12.9091
170 (10/1/2003)	130 (10/1/2002)	(170 - 130)/(3 - 2)	40
112 (10/1/2004)	130 (10/1/2002)	(112 - 130)/(4 - 2)	-9
90.3 (10/1/2005)	130 (10/1/2002)	(90.3 - 130)/(5 - 2)	-13.2333
110 (10/1/2006)	130 (10/1/2002)	(110 - 130)/(6 - 2)	-5
71 (10/1/2007)	130 (10/1/2002)	(71 - 130)/(7 - 2)	-11.8
61 (10/1/2008)	130 (10/1/2002)	(61 - 130)/(8 - 2)	-11.5
57 (10/1/2009)	130 (10/1/2002)	(57 - 130)/(9 - 2)	-10.4286
49 (10/1/2010)	130 (10/1/2002)	(49 - 130)/(10 - 2)	-10.125
39 (10/1/2011)	130 (10/1/2002)	(39 - 130)/(11 - 2)	-10.1111
38 (10/1/2013)	130 (10/1/2002)	(38 - 130)/(12 - 2)	-9.2
112 (10/1/2004)	170 (10/1/2003)	(112 - 170)/(4 - 3)	-58
90.3 (10/1/2005)	170 (10/1/2003)	(90.3 - 170)/(5 - 3)	-39.85
110 (10/1/2006)	170 (10/1/2003)	(110 - 170)/(6 - 3)	-20
71 (10/1/2007)	170 (10/1/2003)	(71 - 170)/(7 - 3)	-24.75
61 (10/1/2008)	170 (10/1/2003)	(61 - 170)/(8 - 3)	-21.8
57 (10/1/2009)	170 (10/1/2003)	(57 - 170)/(9 - 3)	-18.8333
49 (10/1/2010)	170 (10/1/2003)	(49 - 170)/(10 - 3)	-17.2857
39 (10/1/2011)	170 (10/1/2003)	(39 - 170)/(11 - 3)	-16.375
38 (10/1/2013)	170 (10/1/2003)	(38 - 170)/(12 - 3)	-14.6667
90.3 (10/1/2005)	112 (10/1/2004)	(90.3 - 112)/(5 - 4)	-21.7
110 (10/1/2006)	112 (10/1/2004)	(110 - 112)/(6 - 4)	-1
71 (10/1/2007)	112 (10/1/2004)	(71 - 112)/(7 - 4)	-13.6667
61 (10/1/2008)	112 (10/1/2004)	(61 - 112)/(8 - 4)	-12.75
57 (10/1/2009)	112 (10/1/2004)	(57 - 112)/(9 - 4)	-11
49 (10/1/2010)	112 (10/1/2004)	(49 - 112)/(10 - 4)	-10.5
39 (10/1/2011)	112 (10/1/2004)	(39 - 112)/(11 - 4)	-10.4286
38 (10/1/2013)	112 (10/1/2004)	(38 - 112)/(12 - 4)	-9.25
110 (10/1/2006)	90.3 (10/1/2005)	(110 - 90.3)/(6 - 5)	19.7
71 (10/1/2007)	90.3 (10/1/2005)	(71 - 90.3)/(7 - 5)	-9.65
61 (10/1/2008)	90.3 (10/1/2005)	(61 - 90.3)/(8 - 5)	-9.76667
57 (10/1/2009)	90.3 (10/1/2005)	(57 - 90.3)/(9 - 5)	-8.325
49 (10/1/2010)	90.3 (10/1/2005)	(49 - 90.3)/(10 - 5)	-8.26
39 (10/1/2011)	90.3 (10/1/2005)	(39 - 90.3)/(11 - 5)	-8.55

38 (10/1/2013)	90.3 (10/1/2005)	(38 - 90.3)/(12 - 5)	-7.47143
71 (10/1/2007)	110 (10/1/2006)	(71 - 110)/(7 - 6)	-39
61 (10/1/2008)	110 (10/1/2006)	(61 - 110)/(8 - 6)	-24.5
57 (10/1/2009)	110 (10/1/2006)	(57 - 110)/(9 - 6)	-17.6667
49 (10/1/2010)	110 (10/1/2006)	(49 - 110)/(10 - 6)	-15.25
39 (10/1/2011)	110 (10/1/2006)	(39 - 110)/(11 - 6)	-14.2
38 (10/1/2013)	110 (10/1/2006)	(38 - 110)/(12 - 6)	-12
61 (10/1/2008)	71 (10/1/2007)	(61 - 71)/(8 - 7)	-10
57 (10/1/2009)	71 (10/1/2007)	(57 - 71)/(9 - 7)	-7
49 (10/1/2010)	71 (10/1/2007)	(49 - 71)/(10 - 7)	-7.33333
39 (10/1/2011)	71 (10/1/2007)	(39 - 71)/(11 - 7)	-8
38 (10/1/2013)	71 (10/1/2007)	(38 - 71)/(12 - 7)	-6.6
57 (10/1/2009)	61 (10/1/2008)	(57 - 61)/(9 - 8)	-4
49 (10/1/2010)	61 (10/1/2008)	(49 - 61)/(10 - 8)	-6
39 (10/1/2011)	61 (10/1/2008)	(39 - 61)/(11 - 8)	-7.33333
38 (10/1/2013)	61 (10/1/2008)	(38 - 61)/(12 - 8)	-5.75
49 (10/1/2010)	57 (10/1/2009)	(49 - 57)/(10 - 9)	-8
39 (10/1/2011)	57 (10/1/2009)	(39 - 57)/(11 - 9)	-9
38 (10/1/2013)	57 (10/1/2009)	(38 - 57)/(12 - 9)	-6.33333
39 (10/1/2011)	49 (10/1/2010)	(39 - 49)/(11 - 10)	-10
38 (10/1/2013)	49 (10/1/2010)	(38 - 49)/(12 - 10)	-5.5
38 (10/1/2013)	39 (10/1/2011)	(38 - 39)/(12 - 11)	-1

Number of Q values = 66

Ordered Q Values

n	Q
1	-58
2	-50
3	-39.85
4	-39
5	-24.75
6	-24.5
7	-22.6667
8	-22.425
9	-21.8
10	-21.7
11	-20
12	-18.8333
13	-18.1667
14	-17.6667
15	-17.2857
16	-17
17	-16.375
18	-15.375
19	-15.25
20	-14.6667
21	-14.5556
22	-14.2
23	-14.1

24	-14
25	-13.6667
26	-13.2333
27	-12.9091
28	-12.75
29	-12
30	-11.8
31	-11.5
32	-11
33	-10.5
34	-10.4286
35	-10.4286
36	-10.125
37	-10.1111
38	-10
39	-10
40	-9.76667
41	-9.65
42	-9.25
43	-9.2
44	-9
45	-9
46	-8.55
47	-8.325
48	-8.26
49	-8
50	-8
51	-7.47143
52	-7.33333
53	-7.33333
54	-7
55	-6.6
56	-6.33333
57	-6
58	-5.75
59	-5.5
60	-5
61	-5
62	-4
63	-1
64	-1
65	19.7
66	40

Sen's Estimator (Median Q) is -10.4643

Time Period	Observations
10/1/2001	1
10/1/2002	1
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1

10/1/2013 1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0
a = 3828
b = 11880
c = 264
Group Variance = 212.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 18.689
M1 = (66 - 18.689)/2.0 = 23.6555
M2 = (66 + 18.689)/2.0 + 1 = 43.3445
Lower limit is -14 = Q(24)
Upper limit is -9.2 = Q(43)
-9.2 < 0 indicating a downward trend in data.

Sen's Slope Analysis
Parameter: VinylChloride
Location: 05-735
Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
5.6 J (10/1/2002)	4.18 (10/1/2001)	(5.6 - 4.18)/(2 - 1)	1.42
7 (10/1/2003)	4.18 (10/1/2001)	(7 - 4.18)/(3 - 1)	1.41
6.7 J (10/1/2004)	4.18 (10/1/2001)	(6.7 - 4.18)/(4 - 1)	0.84
7.2 J (10/1/2005)	4.18 (10/1/2001)	(7.2 - 4.18)/(5 - 1)	0.755
7.4 (10/1/2006)	4.18 (10/1/2001)	(7.4 - 4.18)/(6 - 1)	0.644
3.4 D (10/1/2007)	4.18 (10/1/2001)	(3.4 - 4.18)/(7 - 1)	-0.13
6.1 (10/1/2008)	4.18 (10/1/2001)	(6.1 - 4.18)/(8 - 1)	0.274286
5.4 (10/1/2009)	4.18 (10/1/2001)	(5.4 - 4.18)/(9 - 1)	0.1525
4.3 (10/1/2010)	4.18 (10/1/2001)	(4.3 - 4.18)/(10 - 1)	0.0133333
2.8 (10/1/2011)	4.18 (10/1/2001)	(2.8 - 4.18)/(11 - 1)	-0.138
2.7 (10/1/2012)	4.18 (10/1/2001)	(2.7 - 4.18)/(12 - 1)	-0.134545
3.2 (10/1/2013)	4.18 (10/1/2001)	(3.2 - 4.18)/(13 - 1)	-0.0816667
7 (10/1/2003)	5.6 J (10/1/2002)	(7 - 5.6)/(3 - 2)	1.4
6.7 J (10/1/2004)	5.6 J (10/1/2002)	(6.7 - 5.6)/(4 - 2)	0.55
7.2 J (10/1/2005)	5.6 J (10/1/2002)	(7.2 - 5.6)/(5 - 2)	0.533333
7.4 (10/1/2006)	5.6 J (10/1/2002)	(7.4 - 5.6)/(6 - 2)	0.45
3.4 D (10/1/2007)	5.6 J (10/1/2002)	(3.4 - 5.6)/(7 - 2)	-0.44
6.1 (10/1/2008)	5.6 J (10/1/2002)	(6.1 - 5.6)/(8 - 2)	0.0833333
5.4 (10/1/2009)	5.6 J (10/1/2002)	(5.4 - 5.6)/(9 - 2)	-0.0285714
4.3 (10/1/2010)	5.6 J (10/1/2002)	(4.3 - 5.6)/(10 - 2)	-0.1625
2.8 (10/1/2011)	5.6 J (10/1/2002)	(2.8 - 5.6)/(11 - 2)	-0.311111
2.7 (10/1/2012)	5.6 J (10/1/2002)	(2.7 - 5.6)/(12 - 2)	-0.29
3.2 (10/1/2013)	5.6 J (10/1/2002)	(3.2 - 5.6)/(13 - 2)	-0.218182
6.7 J (10/1/2004)	7 (10/1/2003)	(6.7 - 7)/(4 - 3)	-0.3
7.2 J (10/1/2005)	7 (10/1/2003)	(7.2 - 7)/(5 - 3)	0.1
7.4 (10/1/2006)	7 (10/1/2003)	(7.4 - 7)/(6 - 3)	0.133333
3.4 D (10/1/2007)	7 (10/1/2003)	(3.4 - 7)/(7 - 3)	-0.9
6.1 (10/1/2008)	7 (10/1/2003)	(6.1 - 7)/(8 - 3)	-0.18
5.4 (10/1/2009)	7 (10/1/2003)	(5.4 - 7)/(9 - 3)	-0.266667
4.3 (10/1/2010)	7 (10/1/2003)	(4.3 - 7)/(10 - 3)	-0.385714
2.8 (10/1/2011)	7 (10/1/2003)	(2.8 - 7)/(11 - 3)	-0.525
2.7 (10/1/2012)	7 (10/1/2003)	(2.7 - 7)/(12 - 3)	-0.477778
3.2 (10/1/2013)	7 (10/1/2003)	(3.2 - 7)/(13 - 3)	-0.38
7.2 J (10/1/2005)	6.7 J (10/1/2004)	(7.2 - 6.7)/(5 - 4)	0.5
7.4 (10/1/2006)	6.7 J (10/1/2004)	(7.4 - 6.7)/(6 - 4)	0.35
3.4 D (10/1/2007)	6.7 J (10/1/2004)	(3.4 - 6.7)/(7 - 4)	-1.1
6.1 (10/1/2008)	6.7 J (10/1/2004)	(6.1 - 6.7)/(8 - 4)	-0.15
5.4 (10/1/2009)	6.7 J (10/1/2004)	(5.4 - 6.7)/(9 - 4)	-0.26
4.3 (10/1/2010)	6.7 J (10/1/2004)	(4.3 - 6.7)/(10 - 4)	-0.4
2.8 (10/1/2011)	6.7 J (10/1/2004)	(2.8 - 6.7)/(11 - 4)	-0.557143
2.7 (10/1/2012)	6.7 J (10/1/2004)	(2.7 - 6.7)/(12 - 4)	-0.5
3.2 (10/1/2013)	6.7 J (10/1/2004)	(3.2 - 6.7)/(13 - 4)	-0.388889
7.4 (10/1/2006)	7.2 J (10/1/2005)	(7.4 - 7.2)/(6 - 5)	0.2
3.4 D (10/1/2007)	7.2 J (10/1/2005)	(3.4 - 7.2)/(7 - 5)	-1.9

6.1 (10/1/2008)	7.2 J (10/1/2005)	(6.1 - 7.2)/(8 - 5)	-0.366667
5.4 (10/1/2009)	7.2 J (10/1/2005)	(5.4 - 7.2)/(9 - 5)	-0.45
4.3 (10/1/2010)	7.2 J (10/1/2005)	(4.3 - 7.2)/(10 - 5)	-0.58
2.8 (10/1/2011)	7.2 J (10/1/2005)	(2.8 - 7.2)/(11 - 5)	-0.733333
2.7 (10/1/2012)	7.2 J (10/1/2005)	(2.7 - 7.2)/(12 - 5)	-0.642857
3.2 (10/1/2013)	7.2 J (10/1/2005)	(3.2 - 7.2)/(13 - 5)	-0.5
3.4 D (10/1/2007)	7.4 (10/1/2006)	(3.4 - 7.4)/(7 - 6)	-4
6.1 (10/1/2008)	7.4 (10/1/2006)	(6.1 - 7.4)/(8 - 6)	-0.65
5.4 (10/1/2009)	7.4 (10/1/2006)	(5.4 - 7.4)/(9 - 6)	-0.666667
4.3 (10/1/2010)	7.4 (10/1/2006)	(4.3 - 7.4)/(10 - 6)	-0.775
2.8 (10/1/2011)	7.4 (10/1/2006)	(2.8 - 7.4)/(11 - 6)	-0.92
2.7 (10/1/2012)	7.4 (10/1/2006)	(2.7 - 7.4)/(12 - 6)	-0.783333
3.2 (10/1/2013)	7.4 (10/1/2006)	(3.2 - 7.4)/(13 - 6)	-0.6
6.1 (10/1/2008)	3.4 D (10/1/2007)	(6.1 - 3.4)/(8 - 7)	2.7
5.4 (10/1/2009)	3.4 D (10/1/2007)	(5.4 - 3.4)/(9 - 7)	1
4.3 (10/1/2010)	3.4 D (10/1/2007)	(4.3 - 3.4)/(10 - 7)	0.3
2.8 (10/1/2011)	3.4 D (10/1/2007)	(2.8 - 3.4)/(11 - 7)	-0.15
2.7 (10/1/2012)	3.4 D (10/1/2007)	(2.7 - 3.4)/(12 - 7)	-0.14
3.2 (10/1/2013)	3.4 D (10/1/2007)	(3.2 - 3.4)/(13 - 7)	-0.0333333
5.4 (10/1/2009)	6.1 (10/1/2008)	(5.4 - 6.1)/(9 - 8)	-0.7
4.3 (10/1/2010)	6.1 (10/1/2008)	(4.3 - 6.1)/(10 - 8)	-0.9
2.8 (10/1/2011)	6.1 (10/1/2008)	(2.8 - 6.1)/(11 - 8)	-1.1
2.7 (10/1/2012)	6.1 (10/1/2008)	(2.7 - 6.1)/(12 - 8)	-0.85
3.2 (10/1/2013)	6.1 (10/1/2008)	(3.2 - 6.1)/(13 - 8)	-0.58
4.3 (10/1/2010)	5.4 (10/1/2009)	(4.3 - 5.4)/(10 - 9)	-1.1
2.8 (10/1/2011)	5.4 (10/1/2009)	(2.8 - 5.4)/(11 - 9)	-1.3
2.7 (10/1/2012)	5.4 (10/1/2009)	(2.7 - 5.4)/(12 - 9)	-0.9
3.2 (10/1/2013)	5.4 (10/1/2009)	(3.2 - 5.4)/(13 - 9)	-0.55
2.8 (10/1/2011)	4.3 (10/1/2010)	(2.8 - 4.3)/(11 - 10)	-1.5
2.7 (10/1/2012)	4.3 (10/1/2010)	(2.7 - 4.3)/(12 - 10)	-0.8
3.2 (10/1/2013)	4.3 (10/1/2010)	(3.2 - 4.3)/(13 - 10)	-0.366667
2.7 (10/1/2012)	2.8 (10/1/2011)	(2.7 - 2.8)/(12 - 11)	-0.1
3.2 (10/1/2013)	2.8 (10/1/2011)	(3.2 - 2.8)/(13 - 11)	0.2
3.2 (10/1/2013)	2.7 (10/1/2012)	(3.2 - 2.7)/(13 - 12)	0.5

Number of Q values = 78

Ordered Q Values

n	Q
1	-4
2	-1.9
3	-1.5
4	-1.3
5	-1.1
6	-1.1
7	-1.1
8	-0.92
9	-0.9
10	-0.9

11	-0.9
12	-0.85
13	-0.8
14	-0.783333
15	-0.775
16	-0.733333
17	-0.7
18	-0.666667
19	-0.65
20	-0.642857
21	-0.6
22	-0.58
23	-0.58
24	-0.557143
25	-0.55
26	-0.525
27	-0.5
28	-0.5
29	-0.477778
30	-0.45
31	-0.44
32	-0.4
33	-0.388889
34	-0.385714
35	-0.38
36	-0.366667
37	-0.366667
38	-0.311111
39	-0.3
40	-0.29
41	-0.266667
42	-0.26
43	-0.218182
44	-0.18
45	-0.1625
46	-0.15
47	-0.15
48	-0.14
49	-0.138
50	-0.134545
51	-0.13
52	-0.1
53	-0.0816667
54	-0.0333333
55	-0.0285714
56	0.0133333
57	0.0833333
58	0.1
59	0.133333
60	0.1525
61	0.2
62	0.2
63	0.274286
64	0.3
65	0.35
66	0.45
67	0.5

68	0.5
69	0.533333
70	0.55
71	0.644
72	0.755
73	0.84
74	1
75	1.4
76	1.41
77	1.42
78	2.7

Sen's Estimator (Median Q) is -0.295

Time Period	Observations
10/1/2001	1
10/1/2002	1
10/1/2003	1
10/1/2004	1
10/1/2005	1
10/1/2006	1
10/1/2007	1
10/1/2008	1
10/1/2009	1
10/1/2010	1
10/1/2011	1
10/1/2012	1
10/1/2013	1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0
a = 4836
b = 15444
c = 312
Group Variance = 268.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 21.006
M1 = (78 - 21.006)/2.0 = 28.497
M2 = (78 + 21.006)/2.0 + 1 = 50.503
Lower limit is -0.5 = Q(28)
Upper limit is -0.13 = Q(51)
-0.13 < 0 indicating a downward trend in data.

APPENDIX I

PHOTOGRAPHIC LOG

AREA 303

Photo #1: Area 303, well MW-303-38 view west of runway.

Photo #2: Area 303, well MW-303-28, view south of site.

Photo #3: Area 303, view of surface water protection well 03-012 near East Canal.

Photo #4: Area 303, East Canal shoreline inspection, view south near well 03-012 of SWMU 62 New Housing Fuel Leak recovery trench and booms 2, 3, and 8 (1 of 3 photos, north to south).

Photo #5: Area 303, East Canal shoreline inspection, north of SWMU 62 recovery trench, view south of thick vegetation (2 of 3 photos, north to south).

Photo #6: Area 303, East Canal shoreline inspection, surface water in heavily vegetated area north of SWMU 62 recovery trench with biogenic sheen (3 of 3 photos, north to south).

FORMER POWER PLANT BUILDING T-1451

Photo #7: Former Power Plant Building T-1451, view east of well E-701.

Photo #8: Former Power Plant Building T-1451, close-up of white micro-organisms (Water Bears) on interface meter at well 01-118.

Photo #11: Former Power Plant Building T-1451, East Canal, shoreline inspection, view south of booms 9/12 and boom 3, and former petroleum seep location (1 of 9 photos, north to south).

Photo #12: Former Power Plant Building T-1451, East Canal shoreline inspection, view of remediated shoreline at former petroleum seep and new monitoring well in background, view south (2 of 9 photos, north to south).

Photo #13: Former Power Plant Building T-1451, East Canal shoreline inspection, view north from boom 11 toward booms 3 and 9/12 and culverts (3 of 9 photos, north to south).

Photo #14: Former Power Plant Building T-1451, East Canal shoreline inspection, view north of boom 11 and petroleum seep (4 of 9 photos, north to south).

Photo #15: Former Power Plant Building T-1451, East Canal shoreline inspection, close-up of southern end of boom 11 and oily sheen (5 of 9 photos, north to south).

Photo #9: Former Power Plant Building T-1451, sediment/ surface water sample NL-08, view west.

Photo #10: Former Power Plant Building T-1451, close-up view of sediment sample NL-08 and location.

Photo #16: Former Power Plant Building T-1451, East Canal shoreline inspection south of boom 11, view north toward culvert (6 of 9 photos, north to south).

Photo #17: Former Power Plant Building T-1451, East Canal shoreline inspection, view south toward the southern end of the canal (7 of 9 photos, north to south).

Photo #18: Former Power Plant Building T-1451, East Canal shoreline inspection, view south of the southern end of the canal (8 of 9 photos, north to south).

Photo #19: Former Power Plant Building T-1451, East Canal shoreline inspection, view south of Crossover Canal (9 of 9 photos, north to south).

HOUSING AREA – ARCTIC ACRES

Photo #20: Housing Area – Arctic Acres, overview of site, view east.

Photo #21: Housing Area – Arctic Acres, well 03-416, view south.

GCI COMPOUND AREA

Photo #22: GCI Compound Area, site overview west.

Photo #23: GCI Compound Area, well 04-203, view west.

NMCB BUILDING T-1416 EXPANDED AREA

Photo #24: NMCB Building T-1416 Expanded Area, view east of well 02-818, NMCB building and excavated trench for surface water drainage.

Photo #25: NMCB Building T-1416 Expanded Area, close-up of well NMCB-08.

Photo #26: NMCB Building T-1416 Expanded Area, shoreline inspection, view east of armor rock shoreline and NMCB buildings from the west end of inspection adjacent to well 02-473 (1 of 19 photos, west to east).

Photo #27: NMCB Building T-1416 Expanded Area, shoreline inspection, view northeast of armor rock shoreline and NMCB building (2 of 19 photos, west to east).

Photo #28: NMCB Building T-1416 Expanded Area, shoreline inspection, view northeast of armor rock (3 of 19 photos, west to east).

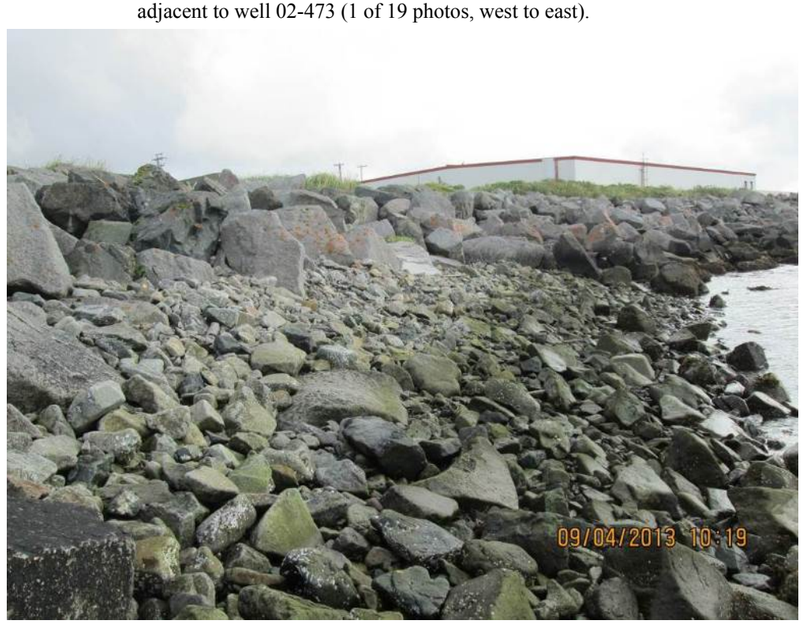


Photo #29: NMCB Building T-1416 Expanded Area, shoreline inspection, view northeast of armor rock and NMCB building in background (4 of 19 photos, west to east).

Photo #30: NMCB Building T-1416 Expanded Area, shoreline inspection, view east of armor rock (5 of 19 photos, west to east).

Photo #31: NMCB Building T-1416 Expanded Area, shoreline inspection, view east of armor rock shoreline (6 of 19 photos, west to east).

Photo #32: NMCB Building T-1416 Expanded Area, shoreline inspection, view east of armor rock shoreline (7 of 19 photos, west to east).

Photo #33: NMCB Building T-1416 Expanded Area, shoreline sediment sample location NL-05 in armor rock at yellow arrow, view north (8 of 19 photos, west to east).

Photo #34: NMCB Building T-1416 Expanded Area, close-up of shoreline sediment sample NL-05 (9 of 19 photos, west to east).

Photo #35: NMCB Building T-1416 Expanded Area, view east of armor rock and corner of NMCB building far upper left (10 of 19 photos, west to east).

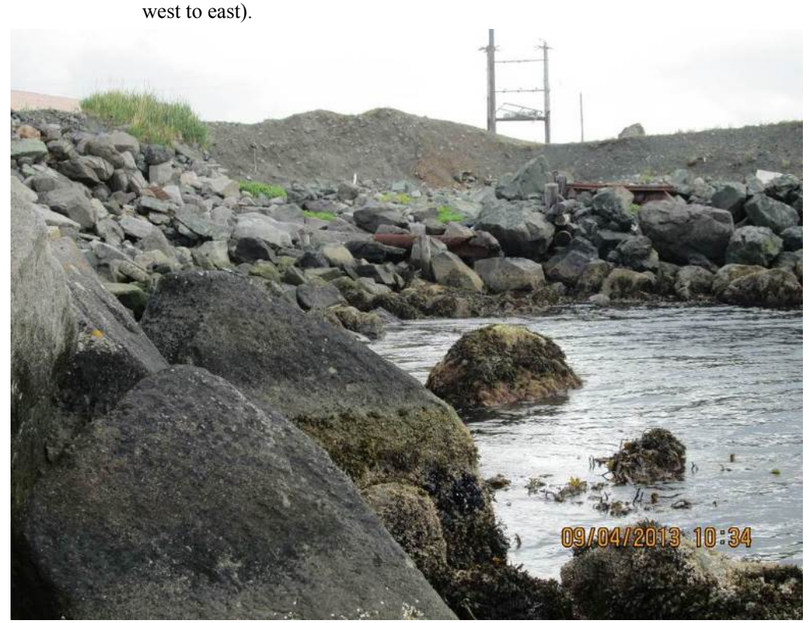


Photo #36: NMCB Building T-1416 Expanded Area, view northeast of steep armor rock shoreline (11 of 19 photos, west to east).

Photo #37: NMCB Building T-1416 Expanded Area, armor rock shoreline with pilings located southeast of buildings, view east (12 of 19 photos, west to east).

Photo #38: NMCB Building T-1416 Expanded Area, view east of armor rock and pilings (13 of 19 photos, west to east).

Photo #39: NMCB Building T-1416 Expanded Area, shoreline inspection, view east of armor rock on shoreline east of site (14 of 19 photos, west to east).

Photo #40: NMCB Building T-1416 Expanded Area, shoreline east of site, view east (15 of 19 photos, west to east).

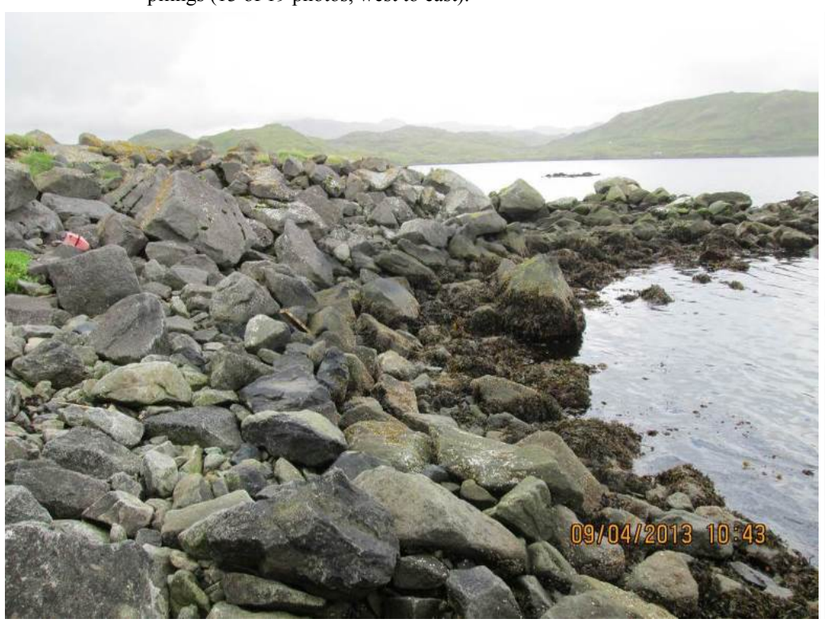


Photo #41: NMCB Building T-1416 Expanded Area, shoreline east of site, view south (16 of 19 photos, west to east).

Photo #42: NMCB Building T-1416 Expanded Area, shoreline east of site, view south of armor wall and seal (17 of 19 photos, west to east).

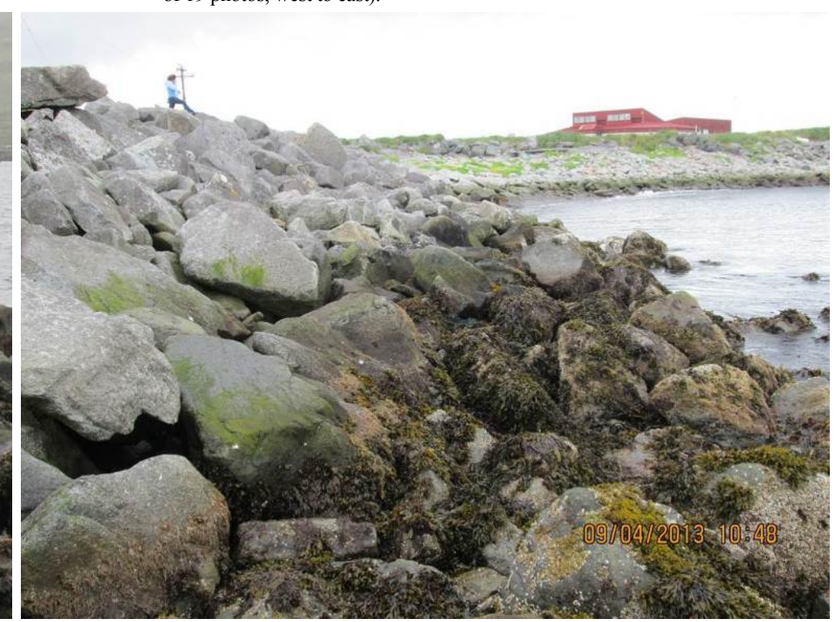


Photo #43: NMCB Building T-1416 Expanded Area, shoreline inspection, view north of armor wall located east of site (18 of 19 photos, west to east).

Photo #44: NMCB Building T-1416 Expanded Area, shoreline east of site, view northeast (19 of 19 photos, west to east).

ROICC CONTRACTORS CAMP

Photo #45: ROICC Contractors Camp, well 08-022 next to building foundation, view west.

RUNWAY 5-23 AVGAS VALVE PIT

Photo #46: Runway 5-23 Avgas Valve Pit, site overview, well 14-100, view northwest.

SA 79, MAIN ROAD PIPELINE

Photo #47: SA 79, Main Road Pipeline, overview of site, view south toward Sweeper Cove.

Photo #48: SA 79, Main Road Pipeline, well 02-230 with Sweeper Cove in background, view southwest.

Photo #49: SA 79, Main Road Pipeline, Sweeper Cove shoreline inspection below well 02-230, view north toward S. Sweeper Creek outlet (1 of 9 photos, south to north).

Photo #50: SA 79, Main Road Pipeline, Sweeper Cove shoreline inspection, well 02-230 in background, view west (2 of 9 photos, south to north).

Photo #51: SA 79, Main Road Pipeline, Sweeper Cove shoreline inspection, view north with Main Road pipeline in background (3 of 9 photos, south to north).

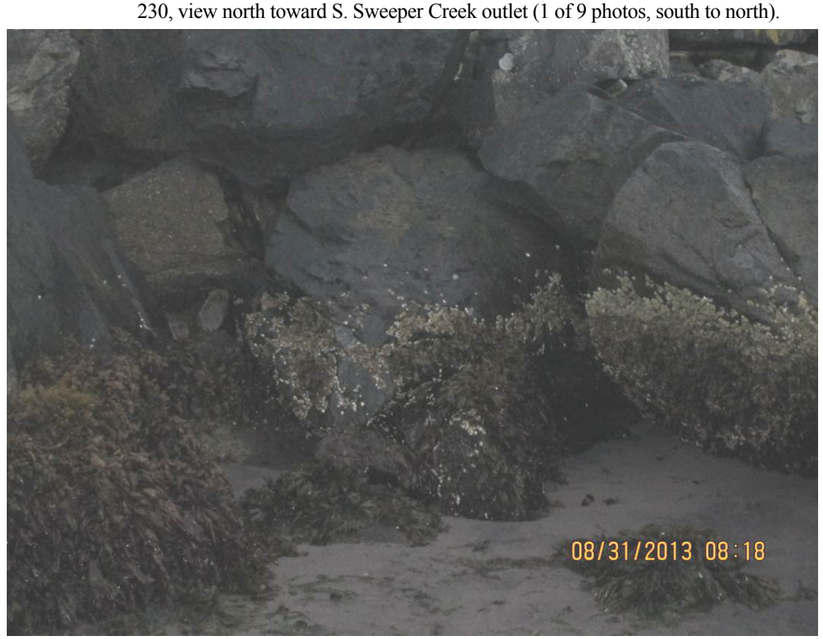


Photo #52: SA 79, Main Road Pipeline, Sweeper Cove shoreline inspection, close up of bottom of armor rock, view west (4 of 9 photos, south to north).

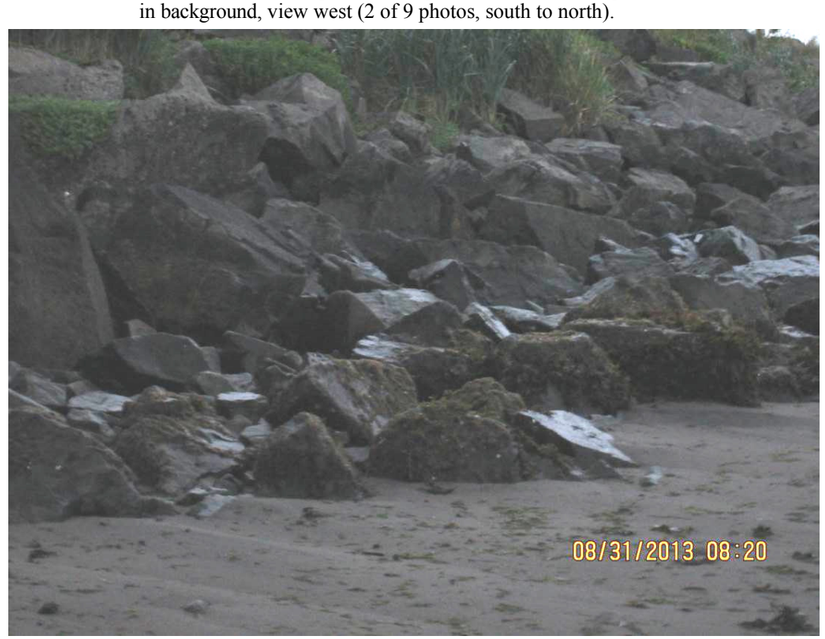


Photo #53: SA 79, Main Road Pipeline, Sweeper Cove shoreline inspection, view north of beach and armor rock (5 of 9 photos, south to north).

Photo #54: SA 79, Main Road Pipeline, view north at mouth of South Sweeper Creek and Main Road pipeline (6 of 9 photos, south to north).

Photo #55: SA 79, Main Road Pipeline, mouth of S. Sweeper Creek and Main Road pipeline, view north (7 of 9 photos, south to north).

Photo #56: SA 79, Main Road Pipeline, Sweeper Cove shoreline inspection, view north of beach and Main Road pipeline (8 of 9 photos, south to north).

Photo #57: SA 79, Main Road Pipeline, Sweeper Cove shoreline inspection, view north at the mouth of Sweeper Creek (9 of 9 photos, south to north).

SA 80, STEAM PLANT NO. 4

Photo #58: SA 80, Steam Plant No. 4, close-up of well 04-173.

Photo #59: SA 80, Steam Plant No. 4, well SP4-3, view east.

SOUTH OF RUNWAY 18-36

Photo #60: South of Runway 18-36, overview of site and product recovery trench sumps (yellow wells), view north.

Photo #61: South of Runway 18-36, well RW-18/36-03 with South Sweeper Creek in background, view south.

Photo #62: South of Runway 18-36, shoreline surface water sample location NSWSD-7 at mouth of South Sweeper Creek, view east.

Photo #63: South of Runway 18-36, shoreline inspection of eastern shore of South Sweeper Creek adjacent to site, view north at mouth of creek with Main Road Pipeline in distance (1 of 39 photos, south to north).

Photo #64: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view west (2 of 39 photos, south to north).

Photo #65: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view west (3 of 39 photos, south to north).

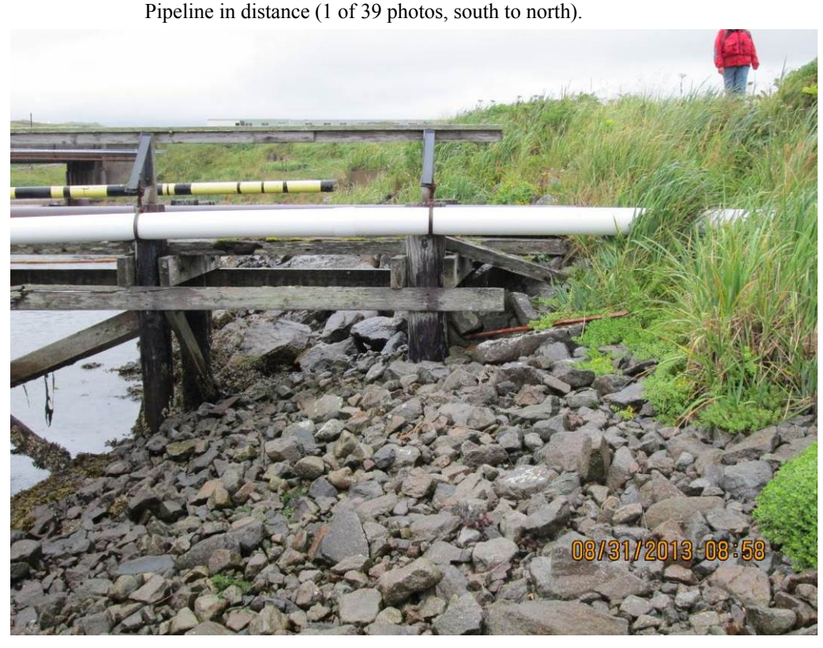


Photo #66: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view west at Main Road pipeline (4 of 39 photos, south to north).

Photo #67: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view northwest with boom 6 in the background (5 of 39 photos, south to north).

Photo #68: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north of product interception trench with boom 6 on shoreline (6 of 39 photos, south to north).

Photo #69: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view southeast of boom 6 and Main Road pipeline (7 of 39 photos, south to north).

Photo #70: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view southeast of boom 6 and Main Road pipeline (8 of 39 photos, south to north).

Photo #71: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view west toward Main Road bridge (9 of 39 photos, south to north).

Photo #72: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view west under Main Road bridge with end of product interception trench in foreground (10 of 39 photos, south to north).

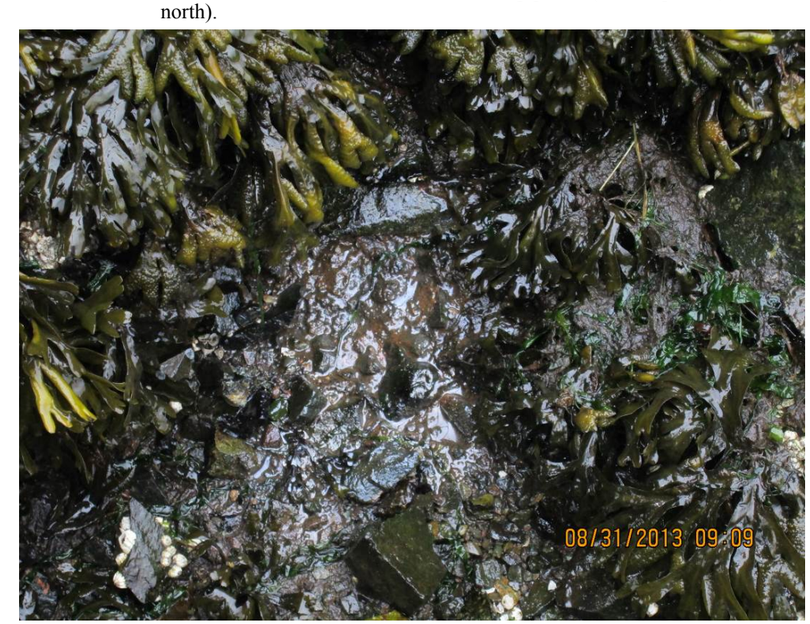


Photo #73: South of Runway 18-36, sheen on sediment at west end of product interception trench (11 of 39 photos, south to north).

Photo #74: South of Runway 18-36, view west of shoreline under Main Road bridge (12 of 39 photos, south to north).

Photo #75: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view west with from beneath Main Road bridge toward lagoon (13 of 39 photos, south to north).

Photo #76: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north toward Moffett Road bridge (14 of 39 photos, south to north).

Photo #77: South of Runway 18-36, shoreline inspection of South Sweeper Creek, sheen on sediment south of Moffett Road bridge, view east (15 of 39 photos, south to north).

Photo #78: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north near Moffett Road bridge (16 of 39 photos, south to north).

Photo #79: South of Runway 18-36, shoreline inspection of South Sweeper Creek, area of sheen near Moffett Road bridge (17 of 39 photos, south to north).

Photo #80: South of Runway 18-36, shoreline inspection of South Sweeper Creek, sheen near Moffett Road bridge (18 of 39 photos, south to north).

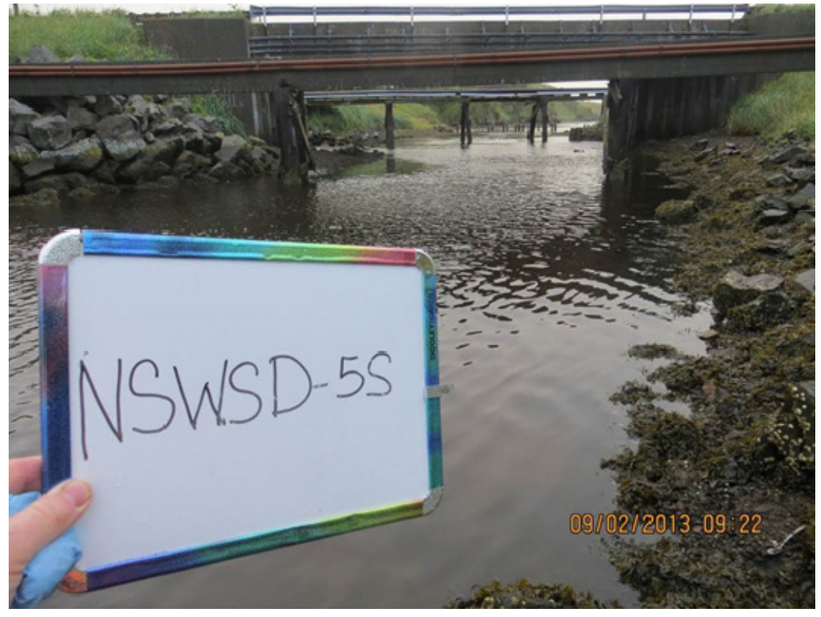


Photo #81: South of Runway 18-36, shoreline sediment sample location NSWSD-5S, view north.

Photo #82: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north toward Moffett Road bridge (19 of 39 photos, south to north).

Photo #83: South of Runway 18-36, shoreline inspection of South Sweeper Creek, sheen on sediment south of Moffett Road bridge (20 of 39 photos, south to north).

Photo #84: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north under Moffett Road bridge (21 of 39 photos, south to north).

Photo #85: South of Runway 18-36, shoreline inspection of South Sweeper Creek, sheen between shoreline and sheet pile wall north of Moffett Road bridge (22 of 39 photos, south to north).

Photo #86: South of Runway 18-36, shoreline inspection of South Sweeper Creek, sheet pile wall on left, view north from Moffett Road bridge (23 of 39 photos, south to north).

Photo #87: South of Runway 18-36, shoreline inspection of South Sweeper Creek, sheen on sediment north of Moffett Road bridge (24 of 39 photos, south to north).

Photo #88: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north from Moffett Road bridge (25 of 39 photos, south to north).

Photo #89: South of Runway 18-36, shoreline sediment sample location NSWSD-4S, view north.

Photo #90: South of Runway 18-36, shoreline inspection of South Sweeper Creek, west of site, view north (26 of 39 photos, south to north).

Photo #91: South of Runway 18-36, shoreline inspection of South Sweeper Creek, west of site, view north (27 of 39 photos, south to north).

Photo #92: South of Runway 18-36, shoreline inspection of South Sweeper Creek, west of site, view north (28 of 39 photos, south to north).

Photo #93: South of Runway 18-36, shoreline inspection of South Sweeper Creek, west of site, view north (29 of 39 photos, south to north).

Photo #94: South of Runway 18-36, shoreline inspection of South Sweeper Creek, west of site, view north (30 of 39 photos, south to north).

Photo #95: South of Runway 18-36, shoreline inspection of South Sweeper Creek, west of site, view north (31 of 39 photos, south to north).

Photo #96: South of Runway 18-36, shoreline inspection of South Sweeper Creek, north and west of site, view north (32 of 39 photos, south to north).

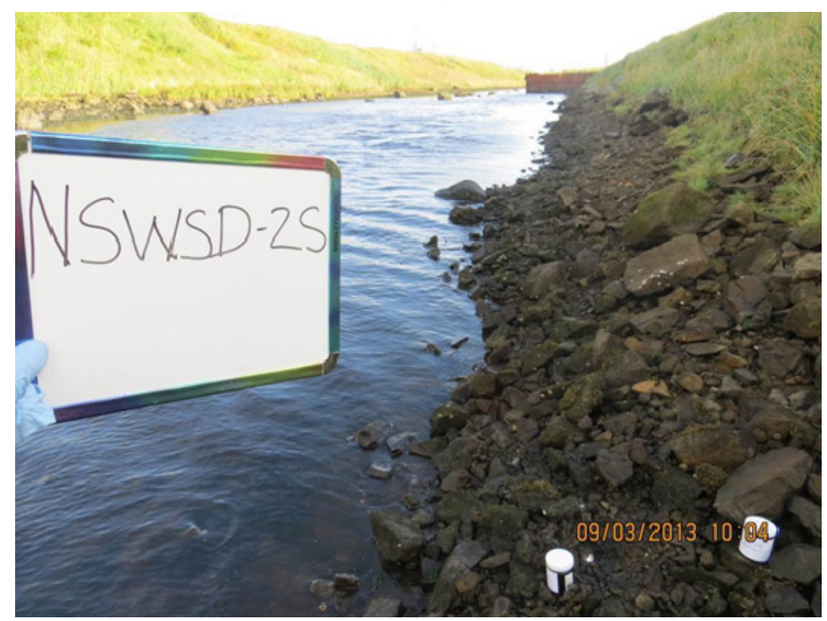


Photo #97: South of Runway 18-36, shoreline sediment sample location NSWSD-2S, view north.

Photo #98: South of Runway 18-36, shoreline inspection of South Sweeper Creek, north and west of site, view north (33 of 39 photos, south to north).

Photo #99: South of Runway 18-36, shoreline inspection of South Sweeper Creek, bulkhead north and west of site, view north (34 of 39 photos, south to north).

Photo #100: South of Runway 18-36, shoreline inspection of South Sweeper Creek, bulkhead north and west of site, view north (35 of 39 photos, south to north).

Photo #101: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north from bulkhead with flowing West Canal discharge pipe in distance (36 of 39 photos, south to north).

Photo #102: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north of West Canal discharge pipes (37 of 39 photos, south to north).

Photo #103: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north toward trestle (38 of 39 photos, south to north).

Photo #104: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north at end of inspection at trestle (39 of 39 photos, south to north).

Photo #105: South of Runway 18-36, shoreline surface water sample location NSWSD-8 at trestle north of site, view west.

SWMU 11, Palisades Landfill

Photo #106: SWMU 11, Palisades Landfill, site overview, view north of metal debris in ravine from sample location 102.

Photo #107: SWMU 11, Palisades Landfill, sediment sample location 101, view south.

Photo #108: SWMU 11, Palisades Landfill, collecting sample at sediment sample location 102 from perennial stream.

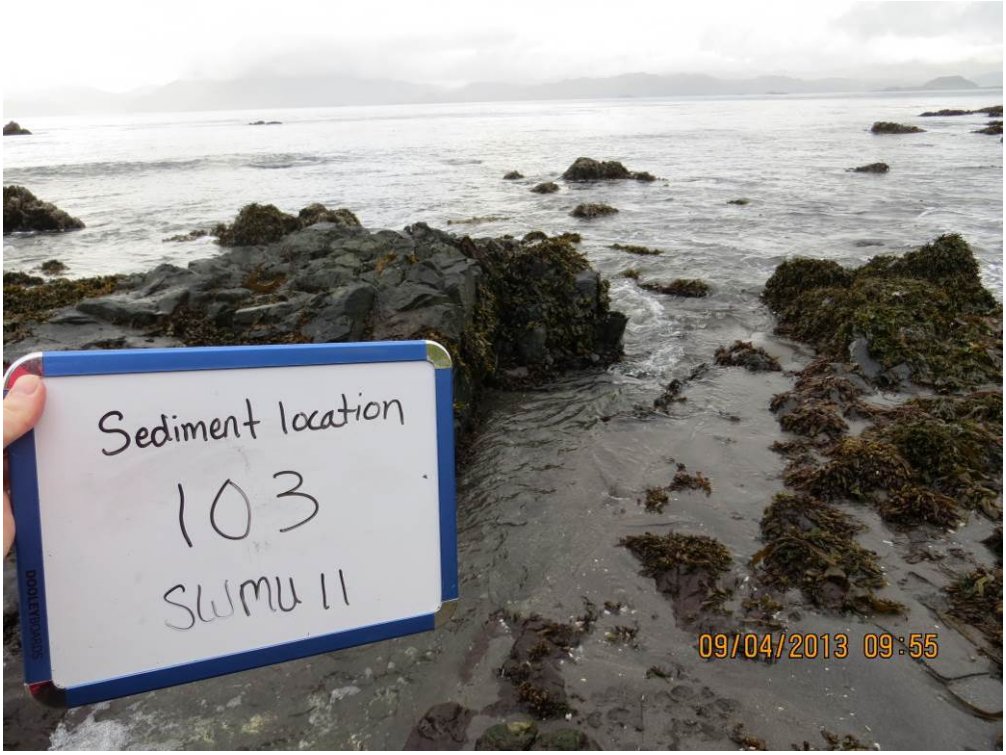


Photo #109: SWMU 11, Palisades Landfill, sediment sample location 103, view south.

SWMU 14, OLD PESTICIDE DISPOSAL AREA

Photo #110: SWMU 14, Old Pesticide Disposal Area, view north of downgradient monitoring well 15-3 with site in upper left photo background.

SWMU 17, POWER PLANT NO. 3

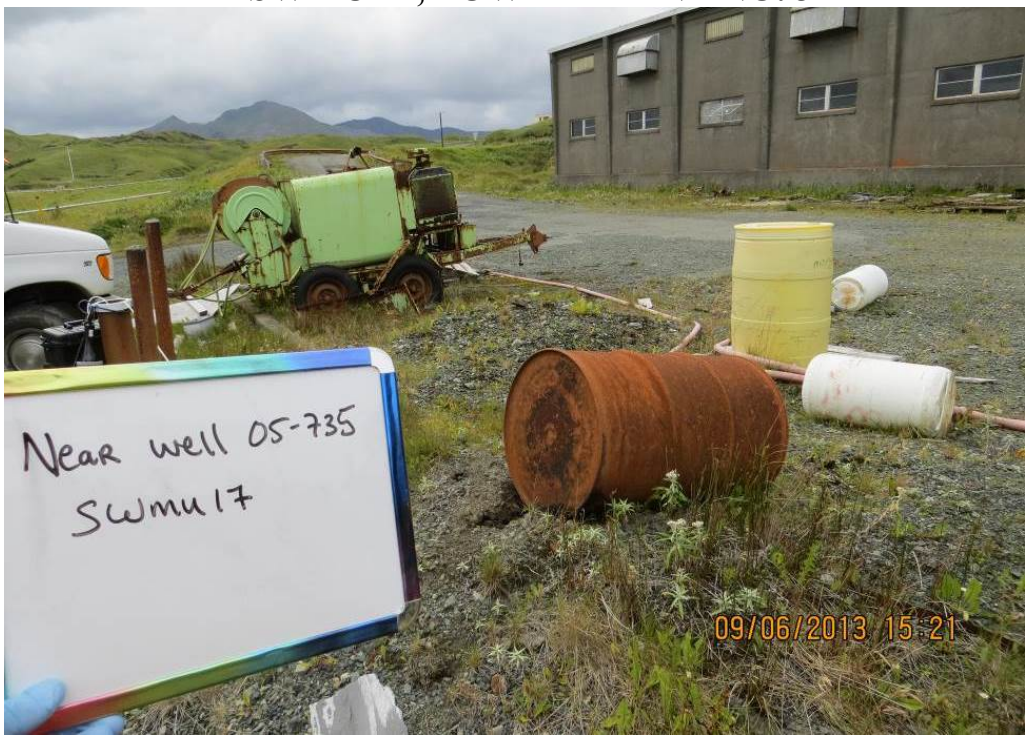


Photo #111: SWMU 17, Power Plant No. 3, equipment staging area, view west of leaking drum near well 05-735 back left.

Photo #112: SWMU 17, Power Plant No. 3, view north of well 05-735 with Power Plant and leaking drum in background.

SWMU 25, Roberts Landfill

Photo #113: SWMU 25, Roberts Landfill, well A-3 on the northeast side of the landfill with small boat harbor and Sweeper Cove in the background, view east.

Photo #114: SWMU 25, Roberts Landfill, well A-5 is located on the southeast side of the landfill, view northeast with Small Boat Harbor in background.

Photo #115: SWMU 25, Roberts Landfill, no water present at surface water sample location RLSW01, view south.

Photo #116: SWMU 25, Roberts Landfill, no water present at surface water sample location RLSW02, view west.

Photo #117: SWMU 25, Roberts Landfill, surface water sample location RLSW03, located next to VFW Dance Hall from perennial stream flowing from the eastern side of the landfill, view southwest.

Photo #118: SWMU 25, Roberts Landfill, close-up of surface water sample location RLSW03.

Photo #119: SWMU 25, Roberts Landfill, surface water sample location RLSW04 in Mitt Creek, view south.

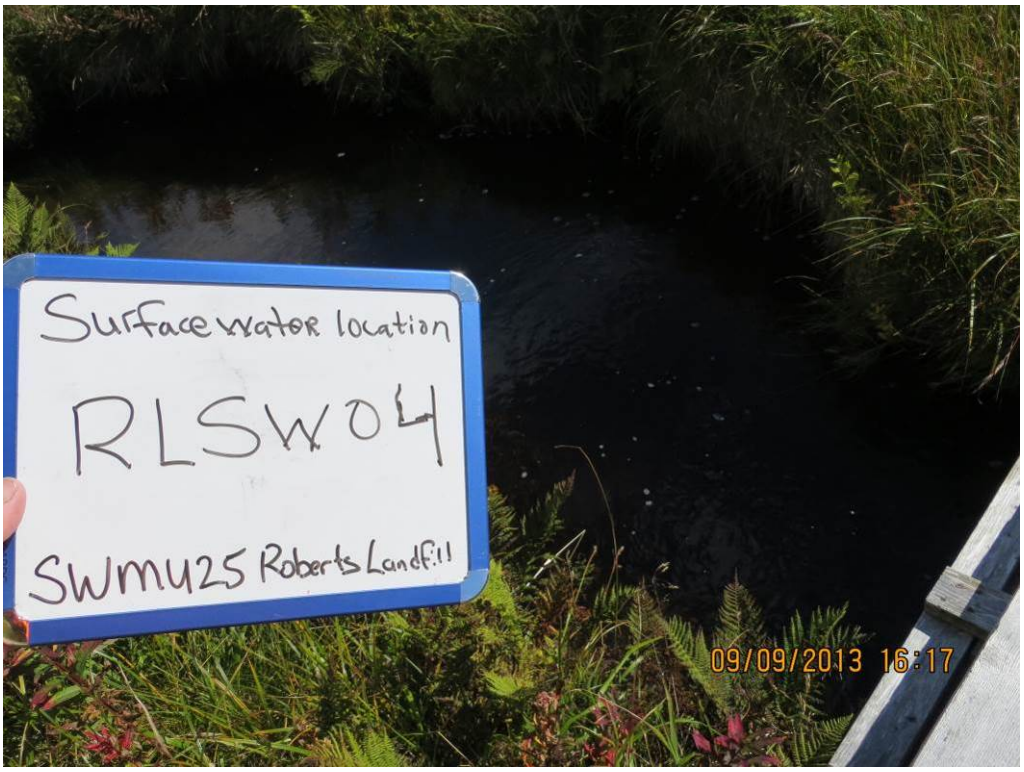


Photo #120: SWMU 25, Roberts Landfill, close-up of surface water sample location RLSW04 in Mitt Creek.

Photo #121: SWMU 25, Roberts Landfill, surface water sample location RLSW05, from perennial stream that flows into Mitt Lake, view northwest toward landfill.

Photo #122: SWMU 25, Roberts Landfill, close-up of surface water sample location RLSW05.

Photo #123: SWMU 25, Roberts Landfill, surface water sample location NL11 collected in a ditch downgradient of RLSW03 before it enters Mitt Creek.

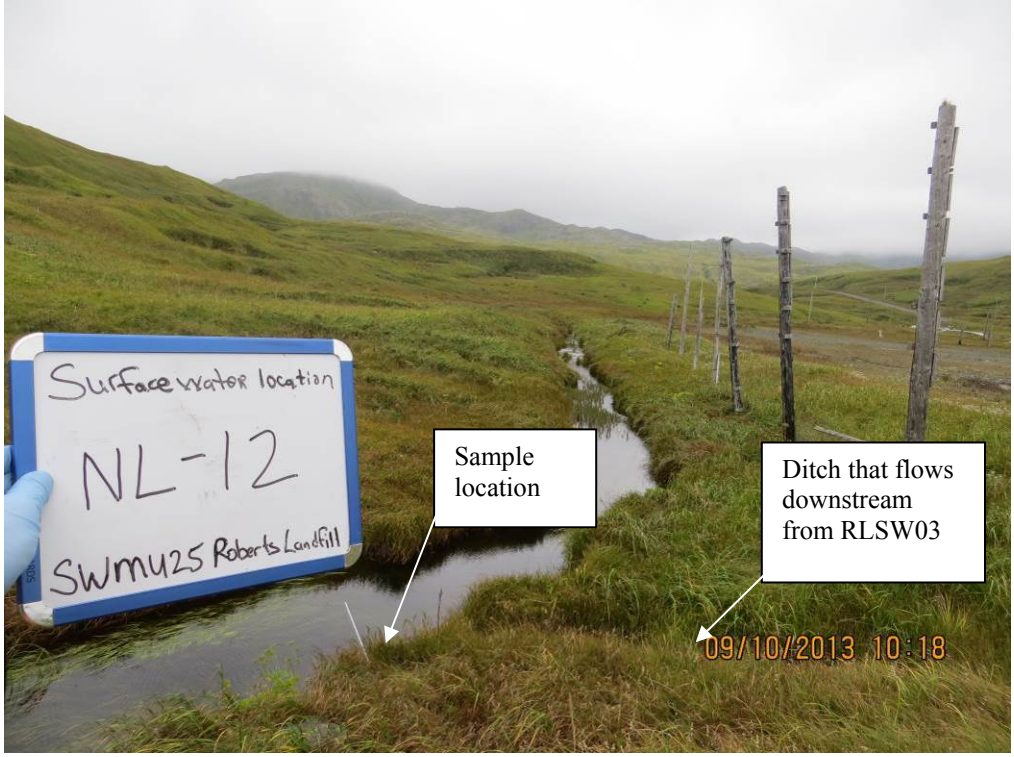


Photo #124: SWMU 25, Roberts Landfill, surface water sample location NL-12, sample collected in Mitt Creek just below ditch confluence, view south.

Photo #125: SWMU 25, Roberts Landfill, close-up of surface water sample location NL-12.

Photo #126: SWMU 25, Roberts Landfill, seep is located on northwest toe of landfill in Adak Fuels Facility and characterized by bright blue and white crystals.

Photo #127: SWMU 25, Roberts Landfill, surface water sample location NL-14, collected from ditch below blue and white groundwater seep, view southwest.

SWMU 55

Photo #128: SWMU 55, overview of site, view south.

Photo #129: SWMU 55, well 55-146, view northwest.

SWMU 60, TANK FARM A

Photo #130: SWMU 60, Tank Farm A well 651, view east with South Sweeper Creek lagoon in background.

Photo #131: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek at Main Road pipeline crossing at mouth of creek, view northwest (1 of 21 photos, south to north).

Photo #132: SWMU 60, Tank Farm A, shoreline inspection of South Sweeper Creek, view west at the south end of boom 6 and Main Road Bridge (2 of 21 photos, south to north).

Photo #133: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, view north of boom 6 and product interception trench below South of Runway 18/36 site (3 of 21 photos, south to north).

Photo #134: SWMU 60, Tank Farm A, shoreline inspection of South Sweeper Creek, view north from boom 6 at Main Road Bridge (4 of 21 photos, south to north).

Photo #135: SWMU 60, Tank Farm A, shoreline inspection of South Sweeper Creek, view west at Main Road Bridge (5 of 21 photos, south to north).

Photo #136: SWMU 60, Tank Farm A, shoreline inspection of S. Sweeper Creek, under Main Road Bridge (6 of 21 photos, south to north).

Photo #137: SWMU 60, Tank Farm A, shoreline inspection looking west toward south end of the inspection with boom 10 (7 of 21 photos, south to north).

Photo #138: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, a seep, view west (10 of 21 photos, south to north).

Photo #139: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, boom 10 and culvert with no flowing water, view west (8 of 21 photos, south to north).

Photo #140: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, collapsed culvert, view south (11 of 21 photos, south to north).

Photo #141: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, boom 10 north of culvert (9 of 21 photos, south to north).

Photo #142: SWMU 60, Tank Farm A, shoreline inspection of South Sweeper Creek, petroleum seep at boom 10, view west (12 of 21 photos, south to north).

Photo #143: SWMU 60, Tank Farm A, shoreline inspection, sediment sample location 852S, view east.

Photo #144: SWMU 60, Tank Farm A, shoreline inspection, sediment sample location 852S, view southeast.

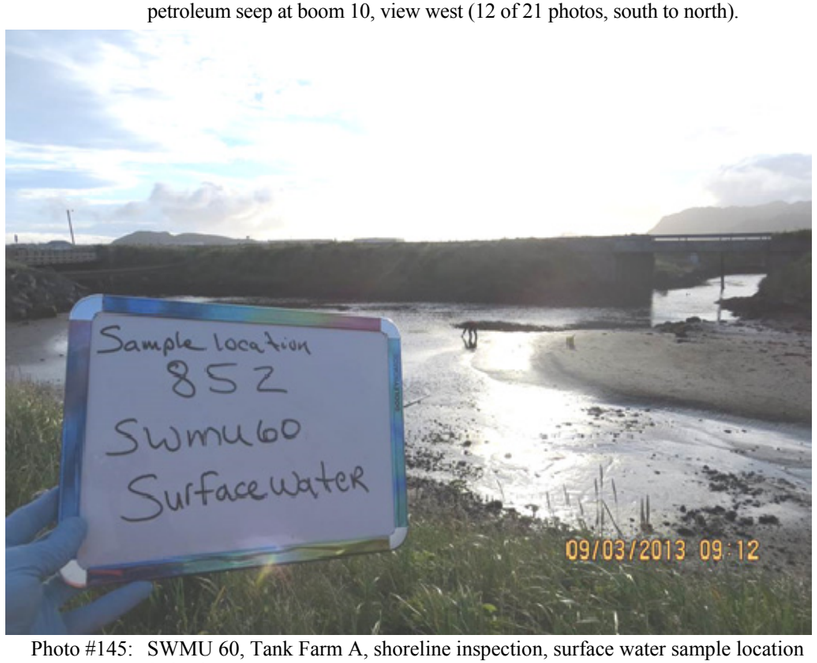


Photo #145: SWMU 60, Tank Farm A, shoreline inspection, surface water sample location 852, view east.

Photo #146: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, boom 10, view north (13 of 21 photos, south to north).

Photo #147: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, sheen on sediment next to end of boom 10, view west (14 of 21 photos, south to north).

Photo #148: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, view north from boom 10 toward collapsed culvert and west bank (16 of 21 photos, south to north).

Photo #149: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, view of washed out culvert, view north (15 of 21 photos, south to north).

Photo #150: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, collapsed culvert north and east of boom 10 seep, view west (17 of 21 photos, south to north).

Photo #151: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, view east (18 of 21 photos, south to north).

Photo #152: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, view east of Moffett Road Bridge (19 of 21 photos, south to north).

Photo #153: SWMU 60, Tank Farm A, shoreline inspection of South Sweeper Creek, northeast side of lagoon, view east (20 of 21 photos, south to north).

Photo #154: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, overview of lagoon and boom 10, view south (21 of 21 photos, south to north).

SWMU 61, TANK FARM B

Photo #155: SWMU 61, Tank Farm B, overview of site, view northeast.

Photo #156: SWMU 61, Tank Farm B, North Sweeper Creek, view northeast of North Sweeper Creek from former tank farm location.

Photo #157: SWMU 61, Tank Farm B, upland well TFB-MW-4B, view northeast toward North Sweeper Creek.

Photo #158: SWMU 61, Tank Farm B, well 14-113 and North Sweeper Creek sample location NL-04 in background, view east.

Photo #159: SWMU 61, Tank Farm B, north end of shoreline inspection, view south of North Sweeper Creek from well 14-113 (1 of 3 photos, south to north).

Photo #160: SWMU 61, Tank Farm B, surface water/sediment sample location NL 04 near well 14-113, view south (2 of 3 photos, south to north).

Photo #161: SWMU 61, Tank Farm B, close-up of sediment sample NL 04 (2 of 3 photos, south to north).

Photo #162: SWMU 61, Tank Farm B, close-up of sediment sample NL 04 (2 of 3 photos, south to north).

Photo #163: SWMU 61, Tank Farm B, north end of shoreline inspection, North Sweeper Creek, view north from NL-04 location (3 of 3 photos, south to north).

SWMU 62, NEW HOUSING FUEL LEAK

Photo #164: SWMU 62, New Housing Fuel Leak, Eagle Bay well 03-778, view southeast.

Photo #165: SWMU 62, New Housing Fuel Leak Area, Sandy Cove Housing nested wells MRP-MW2 and MRP-MW-3, view southeast.

Photo #166: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view south of boom 8 and petroleum seep (1 of 12 photos, north to south).

Photo #167: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, petroleum seep at boom 8 (2 of 12 photos, north to south).

Photo #168: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, pooled product at shoreline petroleum seep at boom 8 (3 of 12 photos, north to south).

Photo #169: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view south from boom 8 toward boom 3 (4 of 12 photos, north to south).

Photo #170: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, surface water sampling location NL-09, view south (5 of 12 photos, north to south).

Photo #171: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, surface water sample location NL-09, view west (6 of 12 photos, north to south).

Photo #172: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view south (7 of 12 photos, north to south).

Photo #173: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view south (8 of 12 photos, north to south).

Photo #174: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view south (9 of 12 photos, north to south).

Photo #175: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view south (10 of 12 photos, north to south).

Photo #176: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view south (11 of 12 photos, north to south).

Photo #177: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view south (12 of 12 photos, north to south).

TANKER SHED UST-42494

Photo #178: Tanker Shed UST-42494, well 04-306 in foreground, view northwest.

APPENDIX J

FREE PRODUCT RECOVERY SUMMARY

APPENDIX J

SUMMARY OF FREE PRODUCT RECOVERY AT ADAK ISLAND FORMER NAVAL COMPLEX

Free product recovery activities were performed at some of the long-term monitoring (LTM) sites during the 2012/2013 contract year. Wells were selected for free product recovery on the basis of the observance of a significant amount of free product during past LTM sampling events.

In September 2006, free product recovery activities resumed for select wells at three sites: South of Runway 18-36 Area; NMCB Building T-1416 Expanded Area (NMCB); and solid waste management unit (SWMU) 62, New Housing Fuel Leak Area.

Free product recovery activities at NMCB ceased in September 2008 because endpoint criteria were achieved. However, in June 2010 free product recovery activities at the NMCB resumed due to observance of free product in surface water protection wells at the site.

In February 2012, with approval of ADEC, free product recovery was discontinued at South of Runway 18-36 Area because the practical endpoint criteria were met. Monitoring at Area 303 was added to the program beginning in June 2013 as required in the Final Decision Document (Navy 2012d).

A summary of the free product activities conducted at the SWMU 62, New Housing Fuel Leak Area during the 2012/2013 contract year (October 2012 through September 2013) is presented in the Final Remedial Action Summary Report, Free Product Recovery (Navy 2014).

Free product recovery is also conducted at specific wells at additional sites. These activities were conducted concurrently with free product recovery activities at SWMU 62, New Housing Fuel Leak Area and Area 303. Free product activities were conducted at 19 additional wells located at the following four sites:

- NMCB
- SA 80, Steam Plant 4
- SWMU 60, Tank Farm A
- Former Power Plant, Building T-1451

Corrected groundwater elevations, product thickness and volumes of recovered free product are presented in Tables J-1 through J-3 for the SWMU 62, New Housing Fuel Leak Area from October 2012 through September 2013. Corrected groundwater elevations, product thickness and volumes of recovered free product are presented in Tables J-4 through J-6 for Area 303. Tables J-7 and J-8 list the observed product thicknesses and volumes of recovered product by month, respectively, for the wells at other sites.

Table J-1. Corrected Groundwater Elevation Summary from October 2012 through September 2013, SWMU 62, New Housing Fuel Leak Area

Monitoring Well	Well Elevation (ft above MLLW)	Total Depth of Well (ft bgs)	Oct-12 (ft above MLLW)	Nov-12 (ft above MLLW)	Dec-12 (ft above MLLW)	Jan-13 (ft above MLLW)	Feb-13 (ft above MLLW)	Mar-13 (ft above MLLW)	Apr-13 (ft above MLLW)	May-13 (ft above MLLW)	Jun-13 (ft above MLLW)	Jul-13 (ft above MLLW)	Aug-13 (ft above MLLW)	Sep-13 (ft above MLLW)	Minimum Groundwater Elevation (ft above MLLW)	Maximum Groundwater Elevation (ft above MLLW)	Average Groundwater Elevation (ft above MLLW)
03-101	26.01	26	3.86	NM	3.88	NM	NM	NM	4.77	NM	3.97	3.56	NM	3.44	3.44	4.77	3.91
03-102	17.27	18.5	3.40	NM	3.38	NM	NM	NM	3.88	NM	-0.50	3.17	NM	3.13	-0.50	3.88	2.74
HMW-303-3	31.64	31.2	4.45	NM	4.50	NM	NM	NM	5.58	NM	4.41	3.85	NM	3.66	3.66	5.58	4.41
HMW-303-11	30.35	32.5	4.10	NM	4.16	NM	NM	NM	5.10	NM	4.26	3.79	NM	3.64	3.64	5.10	4.17
MW-15	20.96	22	3.56	NM	3.52	NM	NM	NM	4.34	NM	3.63	3.25	NM	3.21	3.21	4.34	3.58
MW-303-12	25.80	35.5	5.07	NM	5.20	NM	NM	NM	6.47	NM	5.12	4.47	NM	4.13	4.13	6.47	5.08
RW-303-4	27.89	38	6.47	NM	6.60	NM	NM	NM	7.84	NM	6.50	5.85	NM	4.54	4.54	7.84	6.30
RW-303-15	31.26	34.1	4.04	NM	4.08	NM	NM	NM	5.03	NM	4.17	3.75	NM	3.58	3.58	5.03	4.11
Sumps																	
SWMU62-R1	6.52	10.30	4.45	NM	4.50	NM	NM	NM	5.58	NM	4.41	3.85	NM	3.66	3.64	5.10	4.17
SWMU62-R2	6.80	10.34	4.10	NM	4.16	NM	NM	NM	5.10	NM	4.26	3.79	NM	3.64	3.21	4.34	3.58
SWMU62-R3	7.47	10.48	3.56	NM	3.52	NM	NM	NM	4.34	NM	3.63	3.25	NM	3.21	4.13	6.47	5.08
SWMU62-R4	8.04	10.19	5.07	NM	5.20	NM	NM	NM	6.47	NM	5.12	4.47	NM	4.13	4.54	7.84	6.30
SWMU62-R5	8.97	9.30	6.47	NM	6.60	NM	NM	NM	7.84	NM	6.50	5.85	NM	4.54	3.58	5.03	4.11
SWMU62-R6	9.52	9.90	4.04	NM	4.08	NM	NM	NM	5.03	NM	4.17	3.75	NM	3.58	-0.47	-0.12	-0.29
Average Elevation	NA	NA	3.05	NM	3.09	NM	NM	NM	3.80	NM	2.91	2.95	NM	2.87	NA	NA	NA

Note:
Groundwater elevations were corrected for free product if present.

Table J-2. Product Thickness Summary from October 2012 through September 2013, SMWU 62, New Housing Fuel Leak Area

Monitoring Well	Oct-12 (feet)	Nov-12 (feet)	Dec-12 (feet)	Jan-13 (feet)	Feb-13 (feet)	Mar-13 (feet)	Apr-13 (feet)	May-13 (feet)	Jun-13 (feet)	Jul-13 (feet)	Aug-13 (feet)	Sep-13 (feet)	Minimum Product Thickness (feet)	Maximum Product Thickness (feet)	Average Product Thickness (feet)	Total Months Product Found
03-101	**0.02**	NM	**0.51**	NM	NM	NM	**0.02**	NM	0	**0.06**	NM	0	0	**0.51**	**0.10**	**4**
03-102	0	NM	0	NM	NM	NM	0	NM	**0.01**	0	NM	0	0	**0.01**	**0.00**	**1**
HMW-303-3	0	NM	0	NM	NM	NM	0	NM	0	**0.01**	NM	0	0	**0.01**	**0.00**	**1**
HMW-303-11	0	NM	0	NM	NM	NM	0	NM	**0.01**	0	NM	0	0	**0.01**	**0.00**	**1**
MW-15	0	NM	0	NM	NM	NM	0	NM	0	0	NM	**0.03**	0	**0.03**	**0.01**	**1**
MW-303-12	**0.02**	NM	0	NM	NM	NM	0	NM	0	0	NM	**0.04**	0	**0.04**	**0.01**	**2**
RW-303-4	0	NM	0	NM	NM	NM	0	NM	0	0	NM	**0.07**	0	**0.07**	**0.01**	**1**
RW-303-15	0	NM	**0.01**	NM	NM	NM	**0.29**	NM	**0.18**	**0.03**	NM	0	0	**0.29**	**0.08**	**4**
Sumps																
SWMU62-R1	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
SWMU62-R2	0	NM	**0.01**	NM	NM	NM	0	NM	0	0	NM	0	0	**0.01**	**0.00**	**1**
SWMU62-R3	**0.11**	NM	**0.13**	NM	NM	NM	**0.16**	NM	**0.22**	**0.16**	NM	**0.16**	**0.11**	**0.22**	**0.16**	**6**
SWMU62-R4	**0.09**	NM	**0.12**	NM	NM	NM	**0.06**	NM	**0.13**	**0.18**	NM	**0.15**	**0.06**	**0.18**	**0.12**	**6**
SWMU62-R5	**0.03**	NM	**0.01**	NM	NM	NM	**0.01**	NM	0	0	NM	0	0	**0.03**	**0.01**	**3**
SWMU62-R6	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
Average Product Thickness	**0.02**	NM	**0.06**	NM	NM	NM	**0.04**	NM	**0.04**	**0.03**	NM	**0.03**	NA	NA	NA	NA

Note:
Bold indicates monitoring wells that had product observed during the reporting period.

Table J-3. Recovered Product Volume Summary from October 2012 through September 2013, SMWU 62, New Housing Fuel Leak Area

Monitoring Well	Oct-12 (gallons)	Nov-12 (gallons)	Dec-12 (gallons)	Jan-13 (gallons)	Feb-13 (gallons)	Mar-13 (gallons)	Apr-13 (gallons)	May-13 (gallon)	Jun-13 (gallon)	Jul-13 (gallons)	Aug-13 (gallons)	Sep-13 (gallons)	Minimum Volume of Recovered Product (gallons)	Maximum Volume of Recovered Product (gallons)	Average Volume of Recovered Product (gallons)	Total Volume of Recovered Product (gallons)
03-101	0	NM	**0.33**	NM	NM	NM	**0.03**	NM	0	0	NM	0	0	**0.33**	**0.06**	**0.36**
03-102	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
HMW-303-3	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
HMW-303-11	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
MW-15	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
MW-303-12	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
RW-303-4	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
RW-303-15	0	NM	0	NM	NM	NM	**0.41**	NM	**0.10**	0	NM	0	0	**0.41**	**0.09**	**0.51**
Sumps																
SWMU62-R1	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
SWMU62-R2	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
SWMU62-R3	**1.11**	NM	**0.95**	NM	NM	NM	**0.99**	NM	**1.11**	**1.11**	NM	**1.11**	**0.95**	**1.11**	**1.06**	**6.38**
SWMU62-R4	**0.01**	NM	**0.95**	NM	NM	NM	**1.10**	NM	**1.11**	**1.11**	NM	**1.11**	**0.01**	**1.11**	**0.90**	**5.39**
SWMU62-R5	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
SWMU62-R6	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
Total Volume of Recovered Product (gallons)	**1.12**	NM	**2.23**	NM	NM	NM	**2.53**	NM	**2.32**	**2.22**	NM	**2.22**	NA	NA	NA	**12.64**
6-Month Moving Average	**0.64**	**0.64**	**0.77**	**0.69**	**0.69**	**0.56**	**0.79**	**0.79**	**0.81**	**1.18**	**1.18**	**1.55**	NA	NA	NA	NA

Note:
Bold indicates monitoring wells that had product recovered during the reporting period.

Table J-4. Corrected Groundwater Elevation Summary from June 2013 through September 2013, Area 303

Monitoring Well	Well Elevation (ft above MLLW)	Total Depth of Well (ft bgs)	Jun-13 (ft above MLLW)	Jul-13 (ft above MLLW)	Aug-13 (ft above MLLW)	Sep-13 (ft above MLLW)	Minimum Groundwater Elevation (ft above MLLW)	Maximum Groundwater Elevation (ft above MLLW)	Average Groundwater Elevation (ft above MLLW)
03-107	31.30	30.5	4.46	3.95	3.72	3.77	3.72	4.46	3.98
MRP-MW2	26.99	25.9	6.83	6.39	5.51	5.20	5.20	6.83	5.98
04-211	28.45	30.0	5.53	4.85	4.54	4.48	4.48	5.53	4.85
MW-303-28	32.83	34.5	5.46	4.80	4.43	4.40	4.40	5.46	4.77
MW-303-32	29.16	28.5	5.94	5.21	4.86	4.76	4.76	5.94	5.19
MW-303-33	26.57	27.5	NM	4.10	3.78	3.73	3.73	4.10	3.87
MW-303-42	32.13	30.0	4.50	3.75	3.42	3.28	3.28	4.50	3.74
MW-303-43	32.50	30.0	4.92	4.14	3.75	3.57	3.57	4.92	4.10
MW-303-44	32.91	30.0	4.68	3.96	3.59	3.43	3.43	4.68	3.92
03-012	9.27	9.0	1.88	1.87	1.64	2.04	1.64	2.04	1.86
MW-303-37	16.23	17.5	3.58	3.24	3.04	3.21	3.04	3.58	3.27
MW-303-30	31.20	32.5	4.30	3.82	3.58	3.66	3.58	4.30	3.84
MW-303-31	31.82	33.0	5.07	4.45	4.17	4.16	4.16	5.07	4.46
MW-303-38	27.68	27.0	3.18	2.61	2.37	2.39	2.37	3.18	2.63
MW-303-39	23.43	26.0	2.64	2.19	1.98	2.06	1.98	2.64	2.22
MW-303-40	17.68	14.0	10.87	10.35	10.15	10.25	10.15	10.87	10.40
MW-303-41	30.73	25.0	12.16	10.09	6.84	5.47	5.47	12.16	8.64
Average Elevation	NA	NA	5.37	4.82	4.32	4.23	NA	NA	NA

Note:
Groundwater elevations were corrected for free product if present.

Table J-5. Product Thickness Summary from June 2013 through September 2013, Area 303

Monitoring Well	Jun-13 (feet)	Jul-13 (feet)	Aug-13 (feet)	Sep-13 (feet)	Minimum Product Thickness (feet)	Maximum Product Thickness (feet)	Average Product Thickness (feet)	Total Months Product Found
03-107	0	0	0	0	0	0	0	0
MRP-MW2	0	0	0	0	0	0	0	0
04-211	0	0	0	0	0	0	0	0
MW-303-28	0	**0.32**	**0.31**	0	0	**0.32**	**0.16**	**2**
MW-303-32	0	0	0	0	0	0	0	0
MW-303-33	NM	0	0	0	0	0	0	0
MW-303-42	**0.02**	0	**0.02**	0	0	**0.02**	**0.01**	**2**
MW-303-43	0	0	0	0	0	0	0	0
MW-303-44	0	0	0	0	0	0	0	0
03-012	0	0	0	0	0	0	0	0
MW-303-37	0	0	0	0	0	0	0	0
MW-303-30	0	0	0	0	0	0	0	0
MW-303-31	0	0	0	0	0	0	0	0
MW-303-38	0	0	0	0	0	0	0	0
MW-303-39	**0.01**	0	0	0	0	**0.01**	**0.00**	**1**
MW-303-40	0	0	0	0	0	0	0	0
MW-303-41	0	0	0	0	0	0	0	0
Average Product Thickness	**0.00**	**0.02**	**0.02**	0	NA	NA	NA	NA

Note:
Bold indicates monitoring wells that had product observed during the reporting period.

Table J-6. Recovered Product Volume Summary from June 2013 through September 2013, Area 303

Monitoring Well	Jun-13 (gallon)	Jul-13 (gallons)	Aug-13 (gallons)	Sep-13 (gallons)	Minimum Volume of Recovered Product (gallons)	Maximum Volume of Recovered Product (gallons)	Average Volume of Recovered Product (gallons)	Total Volume of Recovered Product (gallons)
03-107	0	0	0	0	0	0	0	0
MRP-MW2	0	0	0	0	0	0	0	0
04-211	0	0	0	0	0	0	0	0
MW-303-28	0	**0.07**	**0.15**	0	0	**0.15**	**0.06**	**0.22**
MW-303-32	0	0	0	0	0	0	0	0
MW-303-33	0	0	0	0	0	0	0	0
MW-303-42	0	0	0	0	0	0	0	0
MW-303-43	0	0	0	0	0	0	0	0
MW-303-44	0	0	0	0	0	0	0	0
03-012	0	0	0	0	0	0	0	0
MW-303-37	0	0	0	0	0	0	0	0
MW-303-30	0	0	0	0	0	0	0	0
MW-303-31	0	0	0	0	0	0	0	0
MW-303-38	0	0	0	0	0	0	0	0
MW-303-39	0	0	0	0	0	0	0	0
MW-303-40	0	0	0	0	0	0	0	0
MW-303-41	0	0	0	0	0	0	0	0
Total Volume of Recovered Product (gallons)	0	**0.07**	**0.15**	0	NA	NA	NA	**0.22**

Note:
Bold indicates monitoring wells that had product recovered during the reporting period.

Table J-7. Product Thickness Summary from October 2012 through September 2013, Other Sites

Monitoring Well	Oct-12 (feet)	Nov-12 (feet)	Dec-12 (feet)	Jan-13 (feet)	Feb-13 (feet)	Mar-13 (feet)	Apr-13 (feet)	May-13 (feet)	Jun-13 (feet)	Jul-13 (feet)	Aug-13 (feet)	Sep-13 (feet)	Minimum Product Thickness (feet)	Maximum Product Thickness (feet)	Average Product Thickness (feet)	Total Months Product Found
NMCB Expanded Area																
02-300	**0.21**	NM	**0.13**	NM	NM	NM	**0.08**	NM	**0.23**	**0.11**	NM	**0.54**	**0.08**	**0.54**	**0.22**	**6**
02-497	**0.04**	NM	**0.01**	NM	NM	NM	0	NM	**0.01**	**0.02**	NM	**0.01**	0	**0.04**	**0.02**	**5**
02-815	0	NM	**0.03**	NM	NM	NM	**0.01**	NM	0	**0.02**	NM	0	0	**0.03**	**0.01**	**3**
02-818	**0.27**	NM	**0.38**	NM	NM	NM	**0.35**	NM	**0.25**	**0.21**	NM	**0.06**	**0.06**	**0.38**	**0.25**	**6**
NMCB-07	**0.07**	NM	**0.03**	NM	NM	NM	**0.03**	NM	**0.02**	**0.02**	NM	**0.01**	**0.01**	**0.07**	**0.03**	**6**
NMCB-10	**0.21**	NM	**0.13**	NM	NM	NM	**0.08**	NM	**0.23**	**0.11**	NM	**0.54**	**0.08**	**0.54**	**0.22**	**6**
SA 80 Steam Plant 4																
04-157	**0.06**	NM	**0.11**	NM	NM	NM	**0.49**	NM	**0.10**	**0.04**	NM	**0.01**	**0.01**	**0.49**	**0.14**	**6**
04-158	**0.02**	NM	**0.26**	NM	NM	NM	**0.53**	NM	**0.04**	0	NM	0	0	**0.53**	**0.14**	**4**
SWMU 60 Tank Farm A																
652	0	NM	0	NM	NM	NM	0	NM	0	0	NM	**0.02**	0	**0.02**	**0.00**	**1**
653	**0.02**	NM	0	NM	NM	NM	0	NM	0	0	NM	**0.03**	0	**0.03**	**0.01**	**2**
Former Power Plant, Building T-1451																
MW-1451-1	NM	NM	NM	NM	NM	NM	NM	NM	**0.03**	0	**0.04**	0	0	**0.04**	**0.01**	**2**
MW-1451-2	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-3	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-4	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-5	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-6	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-7	NM	NM	NM	NM	NM	NM	NM	NM	**0.52**	**0.32**	**0.74**	**0.43**	**0.32**	**0.74**	**0.17**	**4**
MW-1451-8	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-9	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0

Note:
Bold indicates monitoring wells that had product observed during the reporting period.

Table J-8. Recovered Product Volume Summary from October 2012 through September 2013, Other Sites

Monitoring Well	Oct-12 (gallons)	Nov-12 (gallons)	Dec-12 (gallons)	Jan-13 (gallons)	Feb-13 (gallons)	Mar-13 (gallons)	Apr-13 (gallons)	May-13 (gallon)	Jun-13 (gallon)	Jul-13 (gallons)	Aug-13 (gallons)	Sep-13 (gallons)	Minimum Volume of Recovered Product (gallons)	Maximum Volume of Recovered Product (gallons)	Average Volume of Recovered Product (gallons)	Total Volume of Recovered Product (gallons)
NMCB Expanded Area																
02-300	**0.03**	NM	**0.03**	NM	NM	NM	0	NM	**0.27**	**0.03**	NM	**0.07**	0	**0.27**	**0.07**	**0.43**
02-497	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
02-815	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
02-818	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
NMCB-07	**0.95**	NM	**0.29**	NM	NM	NM	**0.85**	NM	**1.29**	**0.40**	NM	**0.03**	**0.03**	**1.29**	**0.64**	**3.81**
NMCB-10	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
Total Volume of Recovered Product (gallons)	**0.98**	NA	**0.32**	NA	NA	NA	**0.85**	NA	**1.56**	**0.43**	NA	**0.10**	NA	NA	NA	**4.24**
SA 80 Steam Plant 4																
04-157	0	NM	**0.05**	NM	NM	NM	**0.32**	NM	**0.04**	0	NM	0	0	**0.32**	**0.07**	**0.41**
04-158	0	NM	0	NM	NM	NM	**0.50**	NM	0	0	NM	0	0	**0.50**	**0.08**	**0.50**
Total Volume of Recovered Product (gallons)	0	NA	**0.05**	NA	NA	NA	**0.82**	NA	**0.04**	0	NA	0	NA	NA	NA	**0.91**
SWMU 60 Tank Farm A																
652	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
653	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
Total Volume of Recovered Product (gallons)	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	NA	NA	NA	0
Former Power Plant, Building T-1451																
MW-1451-1	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-2	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-3	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-4	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-5	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-6	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-7	NM	NM	NM	NM	NM	NM	NM	NM	**0.59**	**0.69**	**0.44**	**0.65**	**0.44**	**0.69**	**0.40**	**2.37**
MW-1451-8	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
MW-1451-9	NM	NM	NM	NM	NM	NM	NM	NM	0	0	0	0	0	0	0	0
Total Volume of Recovered Product (gallons)	NM	NM	NM	NM	NM	NM	NM	NM	**0.59**	**0.69**	**0.44**	**0.65**	NA	NA	NA	**2.37**

Note:
Bold indicates monitoring wells that had product recovered during the reporting period.

APPENDIX K

TIDE CHARTS

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Adak Island, AK August, 2013 Tides

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	1	2	3
L 5:33a 0.80 H 11:29a 2.30 L 4:25p 1.40 H 11:05p 3.60 ↑ 7:02a ↓ 10:42p	L 6:29a 0.40 H 1:11p 2.20 L 5:01p 1.90 H 11:34p 3.70 ↑ 7:04a ↓ 10:40p	L 7:20a 0.00 H 2:57p 2.30 L 5:25p 2.20 ↑ 7:05a ↓ 10:39p	H 12:01a 3.70 L 8:08a -0.20 ↑ 7:07a ↓ 10:37p	H 12:26a 3.70 L 8:54a -0.30 ↑ 7:08a ↓ 10:35p	H 12:48a 3.70 L 9:38a -0.40 ↑ 7:10a ↓ 10:34p	H 1:09a 3.70 L 10:20a -0.30 ↑ 7:12a ↓ 10:32p
4	5	6	7	8	9	10
H 1:31a 3.70 L 11:00a -0.30 ↑ 7:13a ↓ 10:30p	H 1:56a 3.60 L 11:38a -0.20 ↑ 7:15a ↓ 10:28p	H 2:25a 3.40 L 12:13p 0.00 ↑ 7:16a ↓ 10:27p	H 3:01a 3.20 L 12:47p 0.20 ↑ 7:18a ↓ 10:25p	H 3:54a 2.90 L 1:19p 0.40 H 10:06p 2.80 ↑ 7:19a ↓ 10:23p	L 2:40a 2.50 H 5:27a 2.60 L 1:49p 0.70 H 9:43p 2.80 ↑ 7:21a ↓ 10:21p	L 3:36a 2.10 H 7:24a 2.30 L 2:17p 1.10 H 9:34p 2.80 ↑ 7:23a ↓ 10:19p
11	12	13	14	15	16	17
L 4:17a 1.60 H 9:18a 2.10 L 2:41p 1.40 H 9:35p 3.00 ↑ 7:24a ↓ 10:17p	L 4:57a 1.10 H 11:05a 2.10 L 3:00p 1.80 H 9:45p 3.30 ↑ 7:26a ↓ 10:15p	L 5:38a 0.50 H 12:53p 2.20 L 3:07p 2.10 H 10:05p 3.60 ↑ 7:27a ↓ 10:13p	L 6:21a 0.10 H 10:35p 3.90 ↑ 7:29a ↓ 10:11p	L 7:07a -0.30 H 11:13p 4.20 ↑ 7:31a ↓ 10:09p	L 7:55a -0.60 H 11:58p 4.30 ↑ 7:32a ↓ 10:07p	L 8:45a -0.80 ↑ 7:34a ↓ 10:05p
18	19	20	21	22	23	24
H 12:50a 4.30 L 9:36a -0.80 ↑ 7:35a ↓ 10:03p	H 1:48a 4.20 L 10:28a -0.60 ↑ 7:37a ↓ 10:01p	H 2:54a 3.90 L 11:20a -0.30 H 7:12p 2.60 L 10:16p 2.40 ↑ 7:39a ↓ 9:59p	H 4:10a 3.50 L 12:11p 0.10 H 7:30p 2.70 ↑ 7:40a ↓ 9:57p	L 12:05a 2.10 H 5:39a 3.10 L 1:02p 0.50 H 7:56p 2.80 ↑ 7:42a ↓ 9:55p	L 1:35a 1.60 H 7:18a 2.80 L 1:53p 1.00 H 8:26p 3.00 ↑ 7:44a ↓ 9:53p	L 2:50a 1.10 H 8:59a 2.60 L 2:43p 1.40 H 8:58p 3.20 ↑ 7:45a ↓ 9:51p
25	26	27	28	29	30	31
L 3:54a 0.70 H 10:33a 2.60 L 3:32p 1.80 H 9:31p 3.30 ↑ 7:47a ↓ 9:48p	L 4:50a 0.30 H 11:59a 2.60 L 4:18p 2.10 H 10:05p 3.40 ↑ 7:48a ↓ 9:46p	L 5:41a 0.10 H 1:18p 2.70 L 5:00p 2.40 H 10:37p 3.40 ↑ 7:50a ↓ 9:44p	L 6:30a -0.10 H 2:34p 2.70 L 5:35p 2.60 H 11:09p 3.40 ↑ 7:52a ↓ 9:42p	L 7:17a -0.10 H 3:54p 2.70 L 5:56p 2.70 H 11:41p 3.40 ↑ 7:53a ↓ 9:40p	L 8:02a -0.10 ↑ 7:55a ↓ 9:37p	H 12:12a 3.40 L 8:46a 0.00 ↑ 7:56a ↓ 9:35p

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Tide table: Sweeper Cove, Adak Island, Alaska
51.8633° N, 176.6317° W

September 2013

Day	High	Low	High	Low	High	Moon	Sunrise	Sunset
Sun 1	12:45 AM HADT / 3.48 ft	9:27 AM HADT / 0.21 ft					7:59 AM HADT	9:32 PM HADT
Mon 2	1:23 AM HADT / 3.39 ft	10:08 AM HADT / 0.38 ft					8:00 AM HADT	9:29 PM HADT
Tue 3	2:06 AM HADT / 3.24 ft	10:46 AM HADT / 0.59 ft					8:02 AM HADT	9:27 PM HADT
Wed 4	3:02 AM HADT / 3.04 ft	11:23 AM HADT / 0.84 ft	7:36 PM HADT / 2.52 ft	10:58 PM HADT / 2.41 ft			8:04 AM HADT	9:25 PM HADT
Thu 5	4:15 AM HADT / 2.81 ft	11:58 AM HADT / 1.13 ft	7:18 PM HADT / 2.52 ft			New Moon	8:05 AM HADT	9:23 PM HADT
Fri 6		12:25 AM HADT / 2.10 ft	5:48 AM HADT / 2.61 ft	12:32 PM HADT / 1.45 ft	7:11 PM HADT / 2.61 ft		8:07 AM HADT	9:20 PM HADT
Sat 7		1:30 AM HADT / 1.69 ft	7:30 AM HADT / 2.51 ft	1:06 PM HADT / 1.79 ft	7:15 PM HADT / 2.77 ft		8:09 AM HADT	9:18 PM HADT
Sun 8		2:23 AM HADT / 1.24 ft	9:10 AM HADT / 2.53 ft	1:39 PM HADT / 2.13 ft	7:29 PM HADT / 3.00 ft		8:10 AM HADT	9:16 PM HADT
Mon 9		3:12 AM HADT / 0.77 ft	10:42 AM HADT / 2.64 ft	2:09 PM HADT / 2.43 ft	7:52 PM HADT / 3.27 ft		8:12 AM HADT	9:13 PM HADT
Tue 10		4:00 AM HADT / 0.33 ft	12:04 PM HADT / 2.77 ft	2:38 PM HADT / 2.67 ft	8:25 PM HADT / 3.54 ft		8:13 AM HADT	9:11 PM HADT
Wed 11		4:48 AM HADT / -0.04 ft	1:19 PM HADT / 2.87 ft	3:06 PM HADT / 2.83 ft	9:06 PM HADT / 3.78 ft		8:15 AM HADT	9:09 PM HADT
Thu 12		5:37 AM HADT / -0.31 ft	2:22 PM HADT / 2.91 ft	3:40 PM HADT / 2.90 ft	9:54 PM HADT / 3.95 ft	First Quarter	8:17 AM HADT	9:06 PM HADT
Fri 13		6:27 AM HADT / -0.44 ft	3:07 PM HADT / 2.89 ft	4:30 PM HADT / 2.87 ft	10:49 PM HADT / 4.01 ft		8:18 AM HADT	9:04 PM HADT
Sat 14		7:18 AM HADT / -0.41 ft	3:38 PM HADT / 2.83 ft	5:39 PM HADT / 2.78 ft	11:48 PM HADT / 3.95 ft		8:20 AM HADT	9:02 PM HADT
Sun 15		8:09 AM HADT / -0.24 ft	4:03 PM HADT / 2.77 ft	6:56 PM HADT / 2.61 ft			8:22 AM HADT	8:59 PM HADT
Mon 16	12:53 AM HADT / 3.77 ft	9:00 AM HADT / 0.06 ft	4:28 PM HADT / 2.75 ft	8:19 PM HADT / 2.36 ft			8:23 AM HADT	8:57 PM HADT
Tue 17	2:06 AM HADT / 3.49 ft	9:52 AM HADT / 0.47 ft	4:54 PM HADT / 2.77 ft	9:43 PM HADT / 2.03 ft			8:25 AM HADT	8:55 PM HADT
Wed 18	3:32 AM HADT / 3.18 ft	10:44 AM HADT / 0.93 ft	5:22 PM HADT / 2.83 ft	11:05 PM HADT / 1.64 ft			8:26 AM HADT	8:52 PM HADT
Thu 19	5:10 AM HADT / 2.94 ft	11:38 AM HADT / 1.40 ft	5:51 PM HADT / 2.93 ft			Full Moon	8:28 AM HADT	8:50 PM HADT
Fri 20		12:19 AM HADT / 1.21 ft	6:56 AM HADT / 2.84 ft	12:36 PM HADT / 1.84 ft	6:23 PM HADT / 3.03 ft		8:30 AM HADT	8:48 PM HADT
Sat 21		1:24 AM HADT / 0.81 ft	8:37 AM HADT / 2.90 ft	1:36 PM HADT / 2.22 ft	6:56 PM HADT / 3.11 ft		8:31 AM HADT	8:45 PM HADT
Sun 22		2:21 AM HADT / 0.47 ft	10:03 AM HADT / 3.04 ft	2:39 PM HADT / 2.51 ft	7:31 PM HADT / 3.17 ft		8:33 AM HADT	8:43 PM HADT
Mon		3:14 AM HADT / 0.22	11:15 AM HADT / 3.18	3:40 PM HADT / 2.71	8:07 PM HADT / 3.21		8:35 AM	8:41 PM

23		ft	ft	ft	ft		HADT	HADT
Tue 24		4:03 AM HADT / 0.07 ft	12:16 PM HADT / 3.27 ft	4:35 PM HADT / 2.84 ft	8:44 PM HADT / 3.24 ft		8:36 AM HADT	8:39 PM HADT
Wed 25		4:49 AM HADT / 0.00 ft	1:10 PM HADT / 3.29 ft	5:23 PM HADT / 2.91 ft	9:22 PM HADT / 3.25 ft		8:38 AM HADT	8:36 PM HADT
Thu 26		5:33 AM HADT / 0.02 ft	1:59 PM HADT / 3.25 ft	6:03 PM HADT / 2.93 ft	10:02 PM HADT / 3.25 ft	Last Quarter	8:40 AM HADT	8:34 PM HADT
Fri 27		6:17 AM HADT / 0.11 ft	2:44 PM HADT / 3.17 ft	6:38 PM HADT / 2.90 ft	10:45 PM HADT / 3.22 ft		8:41 AM HADT	8:32 PM HADT
Sat 28		6:58 AM HADT / 0.26 ft	3:24 PM HADT / 3.05 ft	7:12 PM HADT / 2.82 ft	11:30 PM HADT / 3.15 ft		8:43 AM HADT	8:29 PM HADT
Sun 29		7:39 AM HADT / 0.47 ft	3:54 PM HADT / 2.93 ft	7:50 PM HADT / 2.69 ft			8:44 AM HADT	8:27 PM HADT
Mon 30	12:20 AM HADT / 3.05 ft	8:17 AM HADT / 0.73 ft	4:12 PM HADT / 2.81 ft	8:35 PM HADT / 2.50 ft			8:46 AM HADT	8:25 PM HADT

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APPENDIX L

RESPONSE TO REGULATOR COMMENTS

Alaska Department of Environmental Conservation
Comments on the Draft 2013 Annual Groundwater and Landfill Monitoring Report
Commenter: Guy Warren (ADEC) Comments Developed: June 18, 2014

Cmt. No.	Pg. & Line	Sec.	Comment/Recommendation	Navy Response 052014
1.	ES-2, Line 3	ES	ADEC concurs with combing these wells with Area 303 to provide a more consolidated look at contaminants in the area. I think the key here is we are not changing site boundaries but combining areas with similar contaminants. Change will need to be carried forward through the CMP.	This change will be carried forward in the CMP revision.
2.		Table 7-1	Please define NC and FP in notes.	These are defined in the acronym list.
3.	Page 7-3, Line 5	7.1	Please include statement that "these wells are included in this analysis for Area 303". I was just confused as the inclusion of these wells was included as a recommendation in the ES and I wasn't expecting them to be included in the analysis this year. A simple statement would help the reader.	Change made.
4.	Page 7-11, Line	7.6	Area 303 was added to the program after signing of the Decision Document (DD) not after a "remedial ground water investigation". Please revise.	Change made.
5.	Page 7-12	7.6	ADEC concurs with recommendations for site. CMP revisions will be required.	This change will be carried forward in the CMP revision.
6.		Figure 7-1	Area site boundaries for SWMU 62 (Eagle Bay) correct to the south? Please highlight wells that are being reassigned to Area 303 (both figures). It may (??) help to show plume boundaries on figure and to color code the other site boundaries.	Site boundaries for Eagle Bay are correct and match the site catalog in the CMP. Figure 7-1 was revised to highlight wells being reassigned. Currently, we only have data that defines the exceedance of endpoint criteria not plume boundaries. Figure 7-1 was revised to use different colors for the other site boundaries.
7.	Page 8-9	8.6	ADEC concurs with recommendation.	No comment required.
8.	Page 9-7	9.6	Area 303 was added to the LTM after signing of the DD. We are not combining sites or changing site boundaries but consolidating monitoring requirements between sites based on common analytes. If we get into changing site boundaries we	Agreed. The recommendation is not to change site boundaries but to combine them for monitoring purposes.

Cmt. No.	Pg. & Line	Sec.	Comment/Recommendation	Navy Response 052014
			have problems with Decision documents. ADEC concurs with recommendations.	
9.	Page 10-6	10.6	ADEC concurs with recommendation.	No comment required.
10.	Page 11-9, Line 10	11.4	Shouldn't it be "…first observance of free product greater than or equal to **0.02** feet…" 0.02 is the cutoff for sampling.	Change made 0.2 to 0.02.
11.	Page 11-9,	11.5	ADEC concurs with recommendation.	No comment required.
12.	Page 12-6	12.6	ADEC concurs with recommendation.	No comment required.
13.	Page 13-6	13.6	ADEC concurs with recommendation. "Cleanup complete with IC's" determination will be granted once we receive the Final report.	No comment required.
14.		14.6	ADEC concurs with recommendation.	No comment required.
15.		15.6	ADEC concurs with recommendation.	No comment required.
16.		16.6	ADEC concurs with recommendation. ADEC would entertain elimination of surface water sampling. No exceedances since at least 2006.	Agreed. Changed recommendation to discontinue surface water sampling at NSWSD-07 and NSWSD-08.
17.		17.6	ADEC concurs with recommendation. ADEC would entertain elimination of SVOC analysis from sediment. No exceedances in 6 sampling events.	Agreed. Changed recommendations to discontinue sampling for SVOCs at the site.
18.		18.6	ADEC concurs with recommendation.	No comment required.
19.		19.6	ADEC concurs with recommendation.	No comment required.
20.	Page 20.4, Line 4	20.3.1	What I am guessing is we have high pH waters exiting the landfill and once they are buffered by other surface water the elevated metals precipitates out. I was going to suggest SVOC/VOC analysis but if this is a pH/metals issue that wouldn't help us any. Is there anything else we can do to explain/verify what is happening here?	Page 20-12, added the following after line 6: "**In seep sample NL-14, total copper analytical results were slightly above the 12 µg/L endpoint criteria, at 17.5 µg/L, but the dissolved copper results were less than the criteria, at 2.21 µg/L, indicating that most**

Cmt. No.	Pg. & Line	Sec.	Comment/Recommendation	Navy Response 052014
				of the copper is in particulate form. Similarly, total aluminum was above the 87 µg/L endpoint criteria at 180 µg/L, but the dissolved aluminum result was non-detected at less than 2.4 µg/L. The seep is characterized by bright blue and white crystals among areas of black discoloring on the hillside where the seep emerges and the ditch water located a few feet directly below was discolored milky white and brown. Most likely precipitation of metals is occurring when the groundwater daylights and oxidizes. The pH pf NL-14 was 7.69 and is neutral. The low flow of the seep prevented the sample from being taken directly at the location that the groundwater daylights. However, the surface water in the ditch directly below this should be indicative of seeping contamination."
21.	Page 20.9, Line 6	20.3.2.1	"…endpoint criteria for copper **<u>in surface water</u>** of….." please add underlined.	Change made.
22.		20.5	ADEC concurs with recommendation. ADEC would entertain reducing frequency for VOC sample analysis to five years. However it would be challenging to have a separate frequency for specific analytes. We can discuss.	Agreed. Section 20.5 was revised to include reducing sampling for VOCS to once every 5-year period to coincide with Landfill Monitoring for 5-Years Sites (Table 2-6). Sampling will occur in 2014, 2018 and then again in 2022 to support the 2015, 2020 and 2025 5-year reviews, respectively.
23.		21.5	ADEC concurs with recommendation.	No comment required.

Alaska Department of Environmental Conservation
Comments on the Draft 2013 Annual Groundwater and Landfill Monitoring Report
Commenter: Guy Warren (ADEC) Comments Developed: June 18, 2014

Cmt. No.	Pg. & Line	Sec.	Comment/Recommendation	Navy Response 052014
24.	Page 22-1, Line 19	22.1	Shouldn't it be "had measureable free product greater than **0.02** ft….." Please revise.	Change made.
25.		22.6	ADEC concurs with recommendations.	No comment required.
26.		23.6	ADEC concurs with recommendation.	No comment required.
27.		24.6	Page 24-16, Line 15: Area 303 was not "newly defined" in 2013. Please revise. ADEC concurs with recommendation.	Page 24-16, line 15, changed the following: "Wells RW-102-4, 03-104, 03-778, MRP-MW2 and MRP-MW3 are within or near the western GRO-DRO plume that is in fact the northern portion of the Area 303 plume **described in** ~~newly defined in 2013 (~~Section 7~~)~~.
28.		Figure 24.2	Estimated extent of endpoint criteria exceedances has changed significantly since last year's report. The extent of contamination is show to not extend east from "RW-303-13". Please explain the basis for this change?	Please note that the Figures are showing the exceedance of endpoint criteria (for DRO and occurrence of free product) not extent of contamination. Page 24-14, added the following after line 27: "**Wells sampled immediately east of RW-303-13 did not exceed endpoint criteria in 2013. Contaminant concentrations in this area historically have exhibited a "seesawing" effect which is illustrated specifically in the Mann-Kendall trend graph for RW-303-13 (Appendix H). Similarly, the areal exceedance of endpoint criteria has expanded and contracted over time. This change may be related to year-to-year groundwater fluctuations.**"
29.		25.6	ADEC concurs with recommendation.	No comment required.