FINAL
15 MAY 2013

Annual Groundwater Monitoring Report

2012 Long-Term Monitoring, Operable Unit A

Former Naval Complex
Adak, Alaska

Department of the Navy
Naval Facilities Engineering Command Northwest
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FINAL
ANNUAL GROUNDWATER MONITORING REPORT
2012 LONG-TERM MONITORING, OPERABLE UNIT A

FORMER NAVAL COMPLEX
ADAK, ALASKA

CONTRACT NUMBER: N44255-09-D-4005
LONG-TERM MONITORING/OPERATIONS TASK ORDER 55

SEALASKA ENVIRONMENTAL SERVICES, LLC
POULSBO, WASHINGTON

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EXECUTIVE SUMMARY

The groundwater monitoring at Operable Unit (OU) A of the Former Naval Complex, Adak, Alaska, was conducted in August and September 2012. The monitoring program for 2012 was implemented as described in the Comprehensive Monitoring Plan (CMP), Revision 5 (Navy 2012e); the 2012 updated CMP tables for Appendix A and B (Navy 2012b); and the Performance Statement of Work and Performance Requirements Summaries in the base contract award (Contract N44255-09-D-4005), Attachment H. Sealaska Environmental Services, LLC (Sealaska) conducted the 2012 monitoring activities from August 24 through September 15, 2012.

During the 2012 monitoring event, groundwater, surface water, and sediment samples were collected from 99 monitoring locations at 16 sites. Monitoring was conducted to satisfy OU A Record of Decision (ROD) (Navy et al. 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.

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 2012c), and contaminant concentration data for 1999 through 2012 provide ample supporting evidence. Monitoring for natural attenuation parameters (NAPs) 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 2012e) 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 (LTM) 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 [AAC] 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.

General recommendations for the monitoring program include the following:

- Combine the Groundwater Monitoring and Landfill Monitoring Reports into one report for the 2013 monitoring program results.
- For all sites, reduce monitoring to every odd year with the next monitoring to occur in 2013.

Based on the 2012 monitoring program results, recommended changes in site-specific monitoring are presented below:

Former Power Plant, Building T-1451

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

- The wells newly installed at this site in the summer of 2012 will be added to the monitoring program.

General Communications, Inc. (GCI) Compound, Underground Storage Tank (UST) GCI-1

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

- Discontinue monitoring for DRO in all wells at the site.

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 02-452, 02-453, 02-455, 02-478, 02-817, NMCB-04, NMCB-08, and NMCB-12.
- Discontinue monitoring at well NMCB-05.
- Discontinue monitoring for benzene and DRO at the site.
- Beginning in 2013, reduce sampling at wells E-201 and 02-461 to every odd year.

Resident Officer in Charge of Construction (ROICC)

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

- Discontinue monitoring at well 08-175.
- Change biennial monitoring at the site to every odd year with the next sampling occurring in 2013.

Runway 5/23 Avgas Valve Pit

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

- Change biennial monitoring at the site to every odd year with the next sampling occurring in 2013.

SA 78, Old Transportation Building, USTs 10583 and 10584, and Aboveground Storage Tanks (ASTs)

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

- Discontinue monitoring at the site and recommend it for closure.

SA 79, Main Road Pipeline, South End and North End

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

- Reduce monitoring at the site to every odd year with the next sampling occurring in 2013.

SA 80, Steam Plant 4, USTs 27089 and 27090

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

- Discontinue monitoring at wells 04-801 and SP4-2.
- Reduce monitoring at the site to every odd year with the next monitoring occurring in 2013.

South of Runway 18-36 Area

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

- Discontinue monitoring at wells: 02-518, E-209, RW-18/36-02, E-207, and Z3-2.
- Reduce monitoring at the site to every odd year with the next monitoring event occurring in 2013.

Solid Waste Management Unit (SWMU) 14, Old Pesticide Storage and Disposal Area

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

- Reduce monitoring at this site to every odd year with the next monitoring to occur in 2013.

SWMU 17, Power Plant No. 3 Area

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

- Discontinue monitoring at wells 05-375, PP-05, and R-1.
- Reduce monitoring at this site to every odd year with the next monitoring to occur in 2013.

SWMU 58/SA 73, Heating Plant 6

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

- Discontinue monitoring at the site and recommend it for closure.

SWMU 60, Tank Farm A

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

- Reduce monitoring at wells LC5A and MW-E006 to every odd year with the next monitoring to occur in 2013.

SWMU 61, Tank Farm B

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

- Discontinue sampling in site surface water/sediment sample at location NL-D-04.
- Reduce monitoring at the site to every odd year with the next monitoring to occur in 2013.

SWMU 62, New Housing Fuel Leak Area

For this site, the following changes to the monitoring program are recommended to Sandy Cove Housing Area:

- Discontinue monitoring at wells 03-895, 03-802, HMW-102-1, and HMW-146-3.
- Discontinue GRO and BTEX sampling in wells 03-104 and 03-778.
- Discontinue benzene sampling in well MW-187-1.
- Reduce monitoring at the Sandy Cove Housing area to every odd year with the next monitoring to occur in 2013.

For this site, the following changes to the monitoring program are recommended to Eagle Bay Housing Area:

- Discontinue monitoring at wells 03-107, 03-518, RW-303-12, HMW-303-1, HMW-303-9, CTO124-MW14, RW-303-9, HMW-303-2, HMW-303-10, RW-303-7, RW-303-06, and MW-303-14.
- Discontinue sampling for DRO at wells 03-103, 03-109, 03-898, and RW-303-14.
- Discontinue sampling for DRO at wells 03-502.

Tanker Shed, UST 42494

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

- Discontinue sampling for GRO at wells 04-290, 04-306, and 04-601.
- Discontinue monitoring at wells 04-176, 04-178, 04-303, 04-304, 04-307, 04-308, 04-309, 04-310, 04-311, 04-314, 04-317, and TS-04.

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ACRONYMS AND ABBREVIATIONS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AST	aboveground storage tank
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
CMP	Comprehensive Monitoring Plan
°C	degrees Celsius
D-Sb	dissolved antimony
DCE	dichloroethene
DO	dissolved oxygen
DOT	U.S. Department of Transportation
DRMO	Defense Reutilization Marketing Office
DRO	diesel-range organics
DS	duplicate sample result
ρlnapl	density of light non-aqueous phase liquid
ρwater	density of water (1,000 kilograms per cubic meter [kg/m3])
DTW	depth-to-water
EPA	U.S. Environmental Protection Agency
FFS	focused feasibility study
FP	free product
ft	feet
GCI	General Communications, Inc.
GRO	gasoline-range organics

ACRONYMS AND ABBREVIATIONS (continued)

GW	groundwater
IC	institutional control
ICMP	Institutional Control Management Plan
IDW	investigation-derived waste
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
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MLLW	mean lower low water
MNA	monitored natural attenuation
MPT	measured product thickness
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

ACRONYMS AND ABBREVIATIONS (continued)

NS	not sampled
NTU	nephelometric turbidity units
ORP	oxidation-reduction potential
OU	operable unit
PAH	polycyclic aromatic hydrocarbon
PCE	tetrachloroethylene
PR	percent recovery
QA	quality assurance
QC	quality control
RAO	remedial action objective
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
SAA	spike amount added
SAERA	State-Adak Environmental Restoration Agreement
SD	sediment
Sealaska	Sealaska Environmental Services, LLC
SIM	selected ion monitoring
SOP	standard operating procedure
SR	sample result
SSR	spike sample result
SU	standard unit
SW	surface water
SWMU	solid waste management unit

ACRONYMS AND ABBREVIATIONS (continued)

SWP	surface water protection
T	trace
TAC	The Aleut Corporation
TAH	total aromatic hydrocarbons
TAqH	total aqueous hydrocarbons
TCE	trichloroethylene
TCLP	toxicity characteristic leaching procedure
T/D-Mn	total and dissolved manganese
T/D-Pb	total and dissolved lead
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

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 reporting limit.
UJ	Analyte was not detected. Reported value is the reporting limit, which is estimated.
X	The reported result may have a slight high bias due to the presence of non-target background 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 2012 annual groundwater 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 and sediment sampling, and inspection activities for the Naval Facilities Engineering Command (NAVFAC) Northwest as part of a monitoring program for Operable Unit (OU) A. Groundwater, surface water, and sediment samples were collected at 16 sites in accordance with the Comprehensive Monitoring Plan (CMP), Revision 5 (Navy 2012e); the 2012 updated CMP tables for Appendix A and B (Navy 2012b); and Attachment H of the Performance Statement of Work and Performance Requirements Summaries in the base contract award (Contract N44255-09-D-4005). This report presents the results of the 2012 long-term monitoring (LTM) event.

1.1 PURPOSE OF MONITORING REPORT

The purpose of this Annual Groundwater Monitoring Report is to present the 2012 monitoring results for the petroleum-release sites and the non-landfill Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites. This report summarizes the methods and results associated with sample collection and evaluates whether the remedies selected to address the impacted groundwater have met the specified endpoint criteria.

1.2 OBJECTIVES OF MONITORING REPORT

This Annual Groundwater Monitoring Report has the following objectives:

- Summarize the 2012 annual groundwater, surface water, and sediment monitoring and field sampling activities at non-landfill CERCLA and petroleum-release sites at the Former Naval Complex;
- Present results of monitoring well, surface water/sediment sample locations, and shoreline inspections at 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;

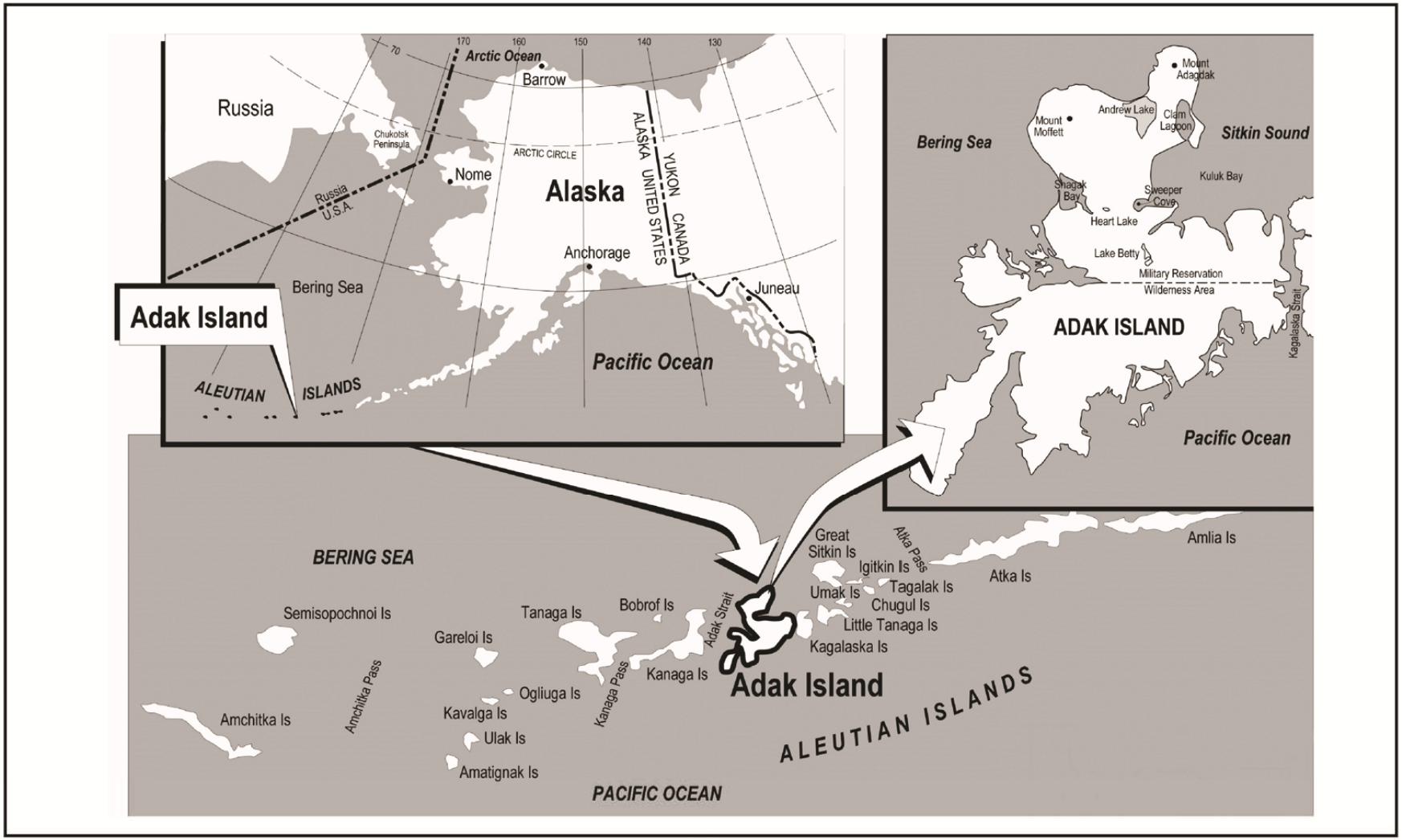
- Evaluate the available data and any existing historical data for trends in concentrations of target analytes;
- Summarize free product recovery in 2012;
- Recommend modifications to sample collection activities for subsequent groundwater monitoring events;
- Collect data to support the 5-year review 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 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 2012 at the 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 2012e).
- Section 6 presents the assessment of quantity and quality of the analytical results obtained from the 2012 monitoring and evaluates the usability of the data for the intended purpose.
- Sections 7 through 22 present, on a site-specific basis, the resulting data obtained during 2012 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 23 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 Table—1999 Through 2012
  - Appendix D, Summary of 2012 and Historical Depth-to-Water Measurements
  - Appendix E, Well Maintenance and Repair List
  - Appendix F, 2012 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
  - Appendix L, Response to Regulator Comments



U.S. NAVY	SEALASKA	Not to Scale	**Figure 1-1** **Location Map, Adak Island, Alaska**	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

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OCT 18, 2012

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 2012, 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 dilapidated and in poor condition. 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 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 ROD (Navy et al. 2000).

2.2 LONG-TERM MONITORING PROGRAM

The monitoring program reported herein addresses historical and ongoing monitoring requirements for 24 petroleum-release and non-landfill CERCLA sites. Since long-term monitoring commence in 2003, six of the 24 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. Table 2-14 lists the monitoring history for the 24 sites since 2003 and changes to the sampling protocols as endpoints were met or site conditions were changed.

The CERCLA sites associated with landfills (Palisades, Metals, White Alice, and Roberts) have been addressed in a separate landfill monitoring report. Monitoring at landfill sites did not occur during 2012 due to a reduction in the monitoring frequency but will occur in 2013 as per the CMP, Revision 5. Beginning in 2013, the landfill and groundwater reports will be combined. 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 15, Future Jobs/Defense Reutilization Marketing Office (DRMO)
- 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 2012 and is included in the CMP, Revision 5 (Navy 2012e). IC inspections occurred concurrently with LTM field activities in 2013 and results of the inspections are presented in the IC Inspection Report (Navy 2012a).

2.3 MONITORING PERFORMED IN 2012

Table 2-2 summarizes the 2012 LTM sites with their current remedies that have not yet received closure or are scheduled to be monitored on odd years only. Table 2-2 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 2012.

Table 2-3 summarizes interim and current remedies and the monitoring purpose for each sampling location for the 2012 sampling event. The types of monitoring implemented at the OU A sites in 2012 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).

Table 2-1. Monitoring History from 2003 through 2012

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
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 Conditional Closure	Site Conditional Closure
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
01-150	MNA	DRO RRO NAPs	DRO RRO NAPs	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO	DRO
01-151	MNA/SWP	DRO RRO NAPs	DRO RRO NAPs	DRO	DRO	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH) NAPs	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	NS
E-701	MNA/BKG	DRO GRO BTEX NAPs	DRO GRO BTEX NAPs	NAPs	NAPs	NAPs	NAPs	NAPs (every 5 yrs)	NS	NS	NS
NL08 (SW)	SWP	NS	NS	NS	NS	NS	NS	NS	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)
NL-08 (SD)	SWP	NS	NS	NS	NS	NS	NS	NS	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
04-202	MNA	NS	NS	DRO GRO BTEX NAPs	GRO BTEX	GRO BTEX	GRO BTEX	GRO benzene NAPs	GRO benzene	GRO	DRO GRO
04-204	MNA	NS	NS	NS	DRO GRO BTEX	GRO BTEX	GRO BTEX	GRO benzene NAPs	DRO GRO	DRO GRO	DRO GRO
04-210	MNA	NS	NS	GRO BTEX NAPs	GRO BTEX	GRO BTEX	GRO BTEX	GRO benzene NAPs	GRO	GRO	DRO GRO
04-213	MNA	NS	NS	NS	DRO GRO BTEX	GRO	GRO	GRO	GRO	GRO	DRO 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

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
GCI Compound, UST GCI-1 (continued)											
MRP-MW9	MNA	NS	NS	NS	DRO GRO BTEX	Discontinued	Discontinued	Discontinued	Discontinued	DRO	Discontinued
Housing Area (Arctic Acres)											
03-416	MNA	DRO RRO NAPs	DRO RRO NAPs	NS	DRO (even years)	NS	DRO	NAPs	DRO	NS	NS
03-420	MNA	DRO RRO NAPs	DRO RRO NAPs	DRO	DRO	DRO	DRO	DRO (odd years) NAPs	NS	DRO	NS
03-421	MNA	NS	NS	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO (odd years)	NS
03-422	5-year review	NS	NS	NS	NS	NS	NS	NS	DRO	Discontinued	Discontinued
03-890	MNA	NS	NS	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO (odd years)	NS
AA-01	MNA	DRO RRO NAPs	DRO RRO NAPs	NS	DRO	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
AA-02	5-year review	NS	NS	NS	NS	NS	NS	NS	DRO	Discontinued	Discontinued
AA-06	5-year review	NS	NS	NS	NS	NS	NS	NS	DRO	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
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
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
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

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
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
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
02-489	MNA	NS	NS	NS	DRO GRO T-Pb BTEX	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
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
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
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
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
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

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
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
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
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
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
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
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
NORPAC Hill Seep Area											
04-145	LGM	NS	NS	DRO	DRO	DRO	Discontinued	Discontinued	Discontinued	Site Conditional Closure	Site Conditional 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		
NL-06 (SD)	SWP	NS	NS	NS	NS	NS	NS	DRO	DRO		

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
08-200	MNA	GRO BTEX NAPs	GRO BTEX NAPs	GRO BTEX	GRO BTEX	GRO BTEX	benzene	benzene NAPs	benzene (even years)	NS	benzene
08-202	MNA	GRO BTEX NAPs	GRO BTEX NAPs	GRO BTEX	GRO BTEX	GRO BTEX	benzene	benzene NAPs	benzene (even years)	NS	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
14-110	MNA	GRO GRO fractions BTEX NAPs	GRO GRO fractions BTEX NAPs	GRO BTEX	BTEX	GRO	GRO (even years)	NAPs	GRO	NS	GRO
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
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 from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
SA 79, Main Road Pipeline											
02-230	SWP/MNA	DRO GRO BTEX NAPs	DRO NAPs	DRO	DRO	DRO	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	DRO	DRO	DRO
MRP-MW8	MNA	DRO GRO BTEX NAPs	DRO NAPs	DRO	DRO	DRO	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH) NAPs	DRO	DRO	DRO
601	MNA	NS	NS	NS	NS	NS	NS	NS	NS	DRO	DRO
602	MNA	NS	NS	NS	NS	NS	NS	NS	NS	DRO	Discontinued
NL-01	MNA/SWP	NS	NS	NS	NS	DRO	DRO BTEX PAHs (for TAH TAqH)	Discontinued	Discontinued	Discontinued	Discontinued
E-403	MNA	NS	NS	NS	NS	NS	DRO	DRO	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
04-158	MNA	NS	NS	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO	DRO
04-159	MNA	NS	NS	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO	DRO
04-173	MNA	NS	DRO GRO BTEX	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO	DRO
04-801	MNA	NS	NS	DRO	DRO	DRO	DRO	DRO NAPs	DRO	DRO	DRO
SP4-3	MNA	DRO NAPs	DRO NAPs	DRO	DRO	DRO	DRO	NAPs	DRO (even years)	NS	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 Conditional Closure	Site Conditional Closure	Site Conditional Closure	Site Conditional 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				
SA 88, P-70 Energy Generator, UST 10578											
12-162	LGM	NS	DRO GRO BTEX	DRO	DRO	DRO	DRO	DRO	DRO	Site Conditional Closure	Site Conditional Closure

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
SA 88, P-70 Energy Generator, UST 10578 (continued)											
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 Conditional Closure	Site Conditional 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 TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH) NAPs	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)
02-232	MNA /SWP	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX (even years) PAHs (for TAH TAqH)	DRO GRO PAHs NAPs	DRO BTEX PAHs (for TAH TAqH even years)	DRO	BTEX PAHs (for TAH TAqH)
18/36-05	MNA	NS	NS	NS	DRO	DRO (odd years)	NS	DRO NAPs	Discontinued	Discontinued	Discontinued
AS-1	MNA/SWP	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH) NAPs	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	BTEX PAHs (for TAH TAqH)
E-206	MNA	NS	NS	NS	DRO	DRO	DRO	DRO NAPs	Discontinued	Discontinued	Discontinued
E-208	MNA /SWP	DRO	DRO	DRO	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH TAqH odd years	NS	DRO (odd years) NAPs	NS	DRO	Discontinued

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
South of Runway 18-36 Area (continued)											
E-218	MNA /SWP	DRO	DRO	DRO	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX (even years) PAHs (for TAH TAqH)	DRO GRO PAHs NAPs	DRO BTEX PAHs (for TAH TAqH even years)	DRO	Discontinued
MRP-12	MNA /SWP	DRO	DRO	DRO	DRO	DRO (odd years)	NS	DRO NAPs	Discontinued	Discontinued	Discontinued
RW-18/36-03	MNA /SWP	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH) NAPs	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	Discontinued
NSWSD-1 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH) NAPs	DRO BTEX PAHs (for TAH TAqH)	Discontinued	Discontinued
NSWSD-2 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	Discontinued	Discontinued
NSWSD-3 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	Discontinued	Discontinued
NSWSD-4 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	Discontinued	Discontinued
NSWSD-5 (SW)	NR	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	Discontinued	Discontinued

Table 2-1. Monitoring History from 2003 through 2012 (continued)

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

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
	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
MW14-5	MNA	DRO GRO GRO fractions BTEX NAPs	DRO GRO GRO fractions BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO GRO	DRO GRO	DRO GRO NAPs	DRO GRO	DRO GRO	DRO GRO
	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	T/D-Pb MeCl2	T/D-Pb	T/D-Pb	T/D-Pb	T/D-Pb (even years)	NS	T/D-Pb
MW15-3	5-year review	NS	NS	NS	NS	NS	NS	NS	DRO GRO T/D-Pb	Discontinued	Discontinued
55-145	5-year review	NS	NS	NS	NS	NS	NS	NS	DRO GRO T/D-Pb	Discontinued	Discontinued
55-146	MNA/SWP	NS	NS	NS	NS	NS	NS	DRO GRO T/D-Pb	DRO GRO T/D-Pb	Discontinued	Discontinued

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
SWMU 15, Future Jobs/DRMO											
MW15-3	MNA	DRO GRO GRO fractions BTEX NAPs	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Site Pending Conditional 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
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
HC-02	MNA	NS	NS	NS	NS	DRO	DRO	DRO NAPs	DRO	Discontinued	Discontinued
HC-03	MNA	NS	NS	NS	NS	DRO	DRO	DRO NAPs	DRO	Discontinued	Discontinued
PP-05	MNA	NS	NS	NS	NS	DRO	DRO	DRO NAPs	DRO (even years)	NS	DRO
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
R-2	MNA	NS	NS	NS	NS	DRO	DRO (even years)	NAPs	DRO	Discontinued	Discontinued
R-5	MNA	NS	NS	NS	NS	DRO	DRO	DRO NAPs	DRO	Discontinued	Discontinued

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
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
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
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
SWMU 58/SA 73, Heating Plant 6											
12-101	MNA	NS	NS	DRO GRO BTEX	DRO GRO BTEX	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
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 from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
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 TAqH)	DRO	DRO BTEX PAHs (for TAH TAqH) NAPs	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	BTEX PAHs (for TAH TAqH)
MW E006	MNA	DRO GRO BTEX NAPs	BTEX NAPs	BTEX	BTEX	BTEX	BTEX	BTEX NAPs	Benzene	Benzene	Benzene
852 (SW)	NR/SWP	NS	NS	NS	DRO GRO BTEX PAHs	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH 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
650	MNA/SWP	NS	NS	NS	NS	NS	NS	NS	NS	DRO BTEX PAHs (for TAH TAqH)	DRO BTEX PAHs (for TAH TAqH)

Table 2-1. Monitoring History from 2003 through 2012 (continued)

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

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
NL-D-04 (Down-gradient SW)	SWP/NR	NS	NS	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	DRO GRO BTEX PAHs (for TAH TAqH)	GRO BTEX PAHs (for TAH TAqH)
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
NL-U-04 (Upgradient SW)	SWP/NR	NS	NS	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH TAqH)	Discontinued	Discontinued	Discontinued
NL-U-04 (Upgradient SD)	SWP/NR	NS	NS	NS	NS	NS	NS	DRO GRO BTEX	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
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
03-619	MNA	NS	NS	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX NAPs	DRO GRO BTEX	DRO GRO BTEX	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
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

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
03-808	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	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
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
HMW-107-2	MNA	NS	NS	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO	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
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
HMW-184-1	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	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

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
HMW-102-8	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	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
MW-107-4	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued	Discontinued
MW-134-3	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	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
MW-146-1	MNA	NS	NS	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	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
SWMU 62, New Housing Fuel Leak, Eagle Bay											
03-103	MNA	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX PAHs NAPs	Switched to MW134-11	Switched to MW134-11	DRO GRO BTEX	DRO GRO BTEX	DRO GRO BTEX PAHs NAPs	DRO GRO BTEX	DRO GRO BTEX	DRO

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
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
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
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
MW-303-7	MNA	NS	NS	NS	NS	NS	NS	NS	NS	DRO GRO BTEX	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
MW-139-2	MNA	NS	NS	NS	DRO GRO BTEX PAHs NAPs	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
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
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

Table 2-1. Monitoring History from 2003 through 2012 (continued)

Location Cross-Reference	Monitoring Purpose	Sampling Program Analytes									
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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
NL-09 (SW)	NS	NS	NS	NS	NS	NS	NS	NS	DRO GRO BTEX PAHs (for TAH, TAqH)	DRO GRO BTEX PAHs (for TAH, TAqH)	DRO GRO BTEX PAHs (for TAH, TAqH)
NL-09 (SD)	NS	NS	NS	NS	NS	NS	NS	NS	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
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
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
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
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
TS-05	SWP	NS	NS	NS	DRO GRO BTEX	DRO GRO BTEX	DRO GRO (even years)	NS	DRO GRO	Discontinued	Discontinued
Yakutat Hangar, UST 2039-A											
05-221	LGM	NS	NS	DRO	DRO	Site Conditional Closure	Site Conditional Closure	Site Conditional Closure	Site Conditional Closure	Site Conditional Closure	Site Conditional 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						

Table 2-2. Summary of Long-Term Groundwater Monitoring Sites and Remedies for 2012

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						
Former Power Plant, Building T-1451	X		X		X	
GCI Compound	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	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	
Remote Area Sites						
SWMU 58/SA 73, Heating Plant 6	X				X	X
SA 78, Old Transportation Building, USTs 10583 and 10584, and ASTs	X				X	

Table 2-3. Summary of ROD Remedy and Intended Long-Term Monitoring Purpose for 2012

Site Name	Remedy (Interim and Final)	Location Cross-Reference	Intended Purpose of Monitoring
Former Power Plant, Building T-1451	MNA	01-118	Natural attenuation
		01-150	Natural attenuation
		01-151	Natural attenuation/Surface water protection
		NL-08	Natural recovery/Surface water protection
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
NMCB Building T-1416	Free product recovery; MNA selected as the post-free product recovery remedy	02-452	Natural attenuation
		02-453	Natural attenuation/Surface water protection
		02-455	Natural attenuation/Surface water protection
		02-461	Natural attenuation
		02-478	Natural attenuation
		02-817	Natural attenuation
		02-818	Natural attenuation/Surface water protection
		E-201	Natural attenuation
		NMCB-04	Natural attenuation
		NMCB-07	Natural attenuation/Surface water protection
		NMCB-08	Natural attenuation/Surface water protection
		NMCB-10	Natural attenuation/Surface water protection
		NMCB-11	Natural attenuation/Surface water protection
		NMCB-12	Natural attenuation/Surface water protection
		NL-05	Surface water protection
ROICC Contractor's Area, UST-ROICC-7	Limited groundwater monitoring followed by MNA	08-175	Natural attenuation
		08-200	Natural attenuation
		08-202	Natural attenuation
Runway 5-23 Avgas Valve Pit	MNA	14-100	Natural attenuation
		14-110	Natural attenuation
SA 78, Old Transportation Building, USTs 10583 and 10584, and ASTs	Free product recovery; MNA selected as the post free product recovery remedy	12-145	Natural attenuation
		MW-116	Natural attenuation
		12-802	Surface water protection
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

Table 2-3. Summary of ROD Remedy and Intended Monitoring Purpose for Each 2012 Sample Location (continued)

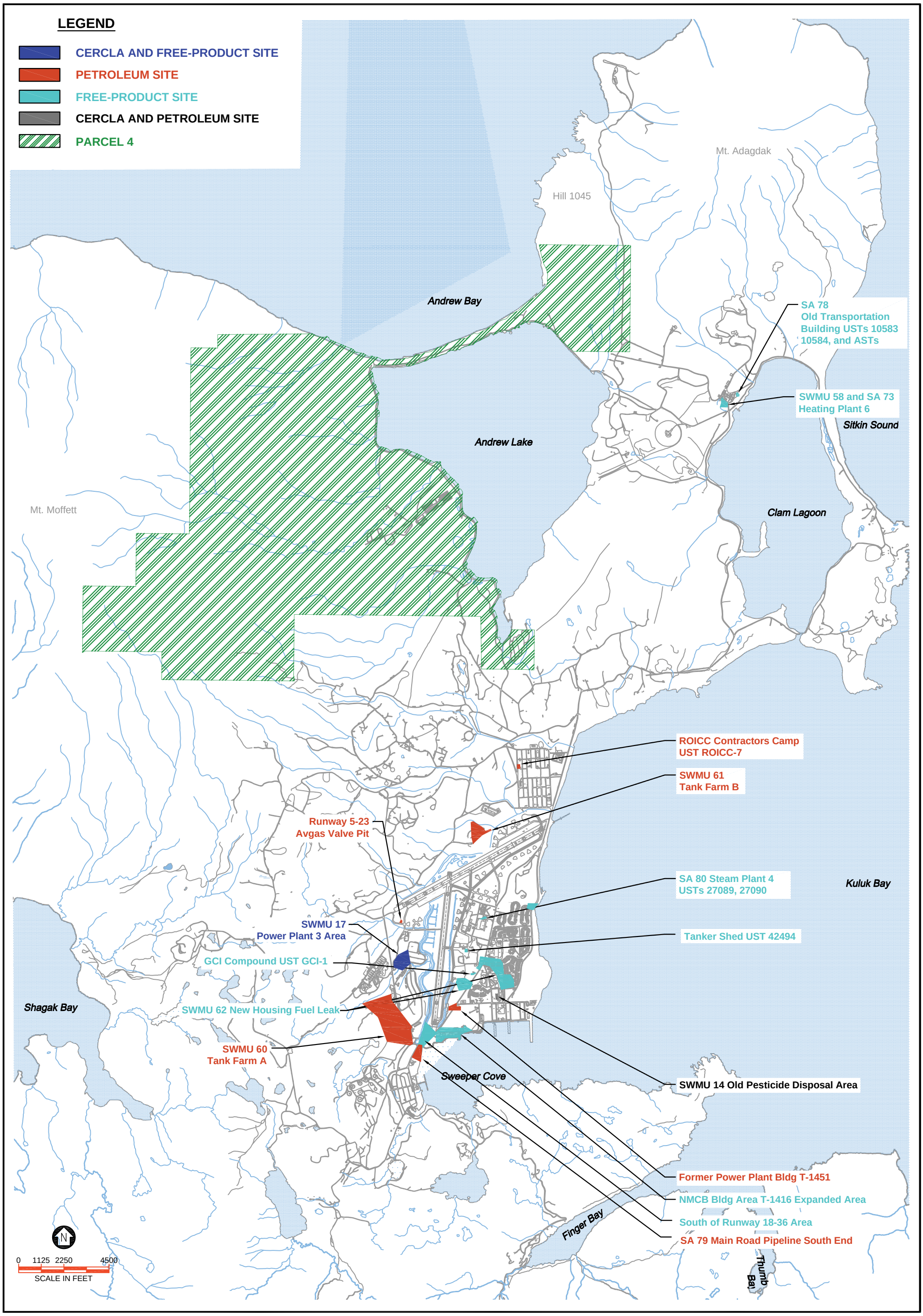
Site Name	Remedy (Interim and Final)	Location Cross-Reference	Intended Purpose of Monitoring
SA 80, Steam Plant 4, USTs 27089 and 27090	Free product recovery; MNA selected as the post-free product recovery remedy	04-158	Natural attenuation
		04-159	Natural attenuation
		04-173	Natural attenuation
		04-801	Natural attenuation
		SP4-3	Natural attenuation
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	MW14-5	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
		05-375	Natural attenuation/Surface water protection
		PP-05	Natural attenuation
		R-1	Natural attenuation
SWMU 58/SA 73, Heating Plant 6	Free product recovery; MNA selected as the post-free product recovery remedy	12-105	Natural attenuation
		12-114	Natural attenuation
		12-203	Natural attenuation
		12-121	Natural attenuation
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

Table 2-3. Summary of ROD Remedy and Intended Monitoring Purpose for Each 2012 Sample Location (continued)

Site Name	Remedy (Interim and Final)	Location Cross-Reference	Intended Purpose of Monitoring
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
		NL-D-04	Surface water protection/Natural Recovery
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
		03-802	Natural attenuation
		03-895	Natural attenuation
		HMW-146-3	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	
		03-103	Natural attenuation
		03-109	Natural attenuation/Surface water protection
		03-502	Natural attenuation
		03-898	Natural attenuation/Surface water protection
		AMW-704	Natural attenuation/Surface water protection
		MW-303-7	Natural attenuation
		RW-303-13	Natural attenuation/Surface water protection
		RW-303-14	Natural attenuation/Surface water protection
		RW-303-16	Natural attenuation/Surface water protection
		NL-09	Natural recovery/Surface water protection

Table 2-3. Summary of ROD Remedy and Intended Monitoring Purpose for Each 2012 Sample Location (continued)

Site Name	Remedy (Interim and Final)	Location Cross-Reference	Intended Purpose of Monitoring
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



U.S.NAVY	SEALASKA	**Figure 2-1** **2012 Groundwater Monitoring Sites on Adak Island**	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

P:\SEALASKA\ADAK\TO 55\2012 GW\FIG 2-1.DWG
PLOT/UPDATE: MAY 6, 2013

3. MONITORING TYPES AND ENDPOINTS

Monitoring endpoints are specified in the CMP, Revision 5 (Navy 2012e). 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 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. 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 2012 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

3.1.1 Monitored Natural Attenuation Groundwater Sites

Natural attenuation monitoring is conducted at sites with the 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
- Based on the evaluation of contaminant concentrations and trends by media relative to monitoring endpoints, 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.

MNA has been selected as the final remedy for 16 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 Naval Mobile Construction Battalion (NMCB), South of Runway 18-36, and SWMU 62, which require three consecutive monitoring events. Table 3-1 lists the groundwater chemical endpoint criteria for petroleum and non-landfill CERCLA sites.

Four 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 September 2012:

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

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
Methylene chloride	5
Tetrachloroethylene	5
Toluene	1,000
Total xylenes	10,000
Trichloroethylene	5
Vinyl chloride	2
Semivolatile Organic Compounds	
Bis(2-ethylhexyl)phthalate	6
Petroleum Hydrocarbons	
Gasoline-range organics	1,300[2]
Diesel-range organics	1,500
Inorganics	
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.

- Source Area (SA) 78, Old Transportation Building, USTs 10583 and 10584, and Aboveground Storage Tanks (ASTs) (10 times cleanup levels)
- 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 17, Power Plant No. 3 (10 times cleanup levels)
- SWMU 58/SA 73, Heating Plant 6 (10 times cleanup levels)
- SWMU 60, Tank Farm A
- SWMU 61, Tank Farm B
- SWMU 62, New Housing Fuel Leak
- Tanker Shed, UST 42494

Natural attenuation of petroleum hydrocarbons has been demonstrated on Adak Island. As a result, the CMP, Revision 5 (Navy 2012e) prescribed natural attenuation parameter (NAP) monitoring once every 5 years. This monitoring was conducted in 2009. 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) as defined in the CMP, Revision 5 (Navy 2012e).

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 2012e), 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 38 wells during 2012.

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 every 5 years and was last conducted during the 2009 field event. 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 2012 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. As specified in the CMP, Revision 5 (Navy 2012e), 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 1) increasing, 2) decreasing, or 3) 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. As defined in the CMP, Revision 5 (Navy 2012e), one-half the detection limit was used if analytical results were not detected.

Trend evaluations were not performed in 2012 for wells that are scheduled to be sampled every odd year and were not sampled in 2012. Trends for these wells were conducted in 2011

and are included in the Final 2011 Annual Groundwater Monitoring Report (Navy 2012c). Trend evaluations will be performed for wells sampled biennially and reported in the subsequent Annual Groundwater Monitoring Report as prescribed by the CMP, Revision 5 (Navy 2012e). Statistical calculations for each site are listed in Appendix H.

3.2 SURFACE WATER PROTECTION GROUNDWATER MONITORING ENDPOINT

The OU A ROD (Navy et al. 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 specified by the OU A ROD for monitoring are Sweeper Cove, North Sweeper Creek, South Sweeper Creek, Kuluk Bay, and Clam Lagoon.

Because several petroleum release sites on Adak Island are located upgradient from these five water bodies, selected monitoring locations at these sites are designated for surface water protection monitoring. This monitoring was planned at the following 36 sampling locations during the 2012 monitoring event:

- Former Power Plant, Building T-1451, locations 01-151 and NL-08
- NMCB Building T-1416, locations 02-453, 02-455, 02-479, 02-818, NMCB-07, NMCB-08, NMCB-10, NMCB-11, NMCB-12, and NL-05
- SA 78, Old Transportation Building, locations 12-802 and NL-10
- SA 79, Main Road Pipeline, South End, location 02-230
- South of Runway 18-36 Area, locations 02-231, 02-232, and AS-1
- SWMU 60, Tank Farm A, locations LC5A, 650, 651, 652, 653, and 852
- SWMU 61, Tank Farm B, locations 14-113, 14-210, NL-04, and NL-D-04
- SWMU 62, New Housing Fuel Leak, locations AMW-704, 03-109, 03-898, RW-303-13, RW-303-14, 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). 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.

3.3 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 2012 monitoring event:

- SWMU 14, Old Pesticide Storage and Disposal Area
- SWMU 17, Power Plant No. 3 Area

Target analytes for CERCLA groundwater monitoring are specified by site and monitoring location (see Table 2-4). Compounds detected during each CERCLA annual 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 volatile organic compound (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 et al. 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.

3.4 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. Sediment and surface water monitoring was conducted at the following two sites during the 2012 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, locations NL-04 and NL-04D (North Sweeper Creek)
- SWMU 62, New Housing Fuel Leak Area, location NL-09 (East Canal)

One sample of surface water and sediment was planned to be collected at SA 78, Old Transportation Building, location NL-10, along the shoreline of Clam Lagoon if petroleum contamination was observed. No contamination was observed during the field activities, so no samples were collected at this location.

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 will be 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.

4. SAMPLING PROGRAM

This section describes the sampling program, including field procedures and sampling requirements, for the 2012 annual groundwater 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 2012 monitoring activities followed the CMP, Revision 5 (Navy 2012e) and the updated CMP Appendix A and B tables (Navy 2012b). Updates to the CMP Appendix A and B tables were based on the recommendations in the Final 2011 Groundwater Monitoring Report (Navy 2012c) which were negotiated with ADEC and EPA.

Monitoring activities occurred from August 24 through September 15, 2012. During the monitoring event, groundwater sample collection was performed at 83 groundwater monitoring locations for 16 sites (Figure 2-1), and 7 surface water and 9 sediment samples were collected from locations at 6 sites. Product thickness and depth-to-water measurements were performed at 170 locations from these sites. Standard operating procedures (SOPs) and Stand-Alone Specific Instructions from the CMP, Revision 5 (Navy 2012e) were followed for sample collection activities. Copies of the field forms and logbooks documenting 2012 field activities are included in Appendix A.

4.1 FIELD ACTIVITIES

Table 4-1 summarizes the 2012 field activities by site and location. Table 4-2 summarizes the environmental quantities and laboratory analytical methods performed on groundwater, surface water, and sediment samples that were collected in 2012 by location.

4.1.1 Field Measurements

Field measurements recorded during 2012 groundwater monitoring activities included the physical measurements of depth-to-groundwater and product thickness. Water level and free product measurements were taken at 170 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. 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 all LTM sites has been well established through the collection of groundwater elevation data since 2005. Since then, groundwater flow direction has not varied at any site. Groundwater elevations collected in 2012 were compared to historical elevations presented in Appendix D-2. For all LTM sites monitored in 2012, groundwater flow directions remained consistent with previous interpreted flow directions.

Field measurements recorded during 2012 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. NAVFAC SOP I-D-7 (Field Parameter Measurement) was followed for all water quality parameter measurements. Measurements of water quality parameters 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 well by site in Sections 7 through 22.

Table 4-1. Summary of 2012 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]	Comments
Former Power Plant, Building T-1451	Groundwater	01-118	X	X	X			
	Groundwater	01-150	X	X	X			
	Groundwater	01-151	NC	NC	NC	NC	X	Well removed during July 2012 remediation activities
	Surface Water	NL-08	X		X	X	X	
	Sediment	NL-08			X	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		X				
	Groundwater	04-213	X	X	X			
	Groundwater	04-701		X				
NMCB Building T-1416	Groundwater	02-300		X				
	Groundwater	02-301		X				
	Groundwater	02-451		X			X	
	Groundwater	02-452	X	X	X			
	Groundwater	02-453	X	X	X		X	
	Groundwater	02-455	X	X	X		X	
	Groundwater	02-461	X	X	X			
	Groundwater	02-463		X				
	Groundwater	02-478	X	X	X			
	Groundwater	02-479		X			X	
	Groundwater	02-497		X				
	Groundwater	02-815		X			X	
	Groundwater	02-816		X				
	Groundwater	02-817	X	X	X			
	Groundwater	02-818	NC	X	NC		X	No sample collected due to product thickness > 0.02 ft
	Groundwater	02-819		X				

Table 4-1. Summary of 2012 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]	Comments
NMCB Building T-1416 (continued)	Groundwater	E-201	X	X	X		X	
	Groundwater	NMCB-04	X	X	X			
	Groundwater	NMCB-05		X				
	Groundwater	NMCB-07	NC	X	NC		X	No sample collected due to product thickness > 0.02 ft
	Groundwater	NMCB-08	X	X	X		X	
	Groundwater	NMCB-09		X				
	Groundwater	NMCB-10	NC	X	NC		X	No sample collected due to product thickness > 0.02 ft
	Groundwater	NMCB-11	X	X	X		X	
	Groundwater	NMCB-12	X	X	X		X	
	Sediment	NL-05			X		X	Collected downgradient of well NMCB-07
ROICC Contractor's Area, UST ROICC-7	Groundwater	08-175	X	X	X			
	Groundwater	08-200	X	X	X			
	Groundwater	08-202	X	X	X			
Runway 5-23 Avgas Valve Pit	Groundwater	14-100	X	X	X			
	Groundwater	14-110	X	X	X			
SA 78, Old Transportation Building (USTs 10583 and 10584, and ASTs)	Groundwater	12-145	X	X	X			
	Groundwater	12-801		X				
	Groundwater	12-802	X	X	X			
	Groundwater	MW-116	X	X	X			
	Groundwater	MW-117		X				
	Surface Water	NL-10	NC		NC	NC	X	No sample collected because no visible contamination was observed
	Sediment	NL-10			NC	NC	X	No sample collected because no visible contamination was observed
SA 79, Main Road Pipeline	Groundwater	02-230	X	X	X		X	
	Groundwater	601	X	X	X		X	
	Groundwater	MRP-MW8	X	X	X		X	

Table 4-1. Summary of 2012 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]	Comments
SA 80, Steam Plant 4 (USTs 27089 and 27090)	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	04-801	X	X	X			
	Groundwater	SP4-2		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	02-518		X				
	Groundwater	18/36-02		X				
	Groundwater	18/36-03		X				
	Groundwater	AS-1	X	X	X	X	X	
	Groundwater	E-207		X				
	Groundwater	E-209		X				
	Groundwater	E-213		X				
	Groundwater	E-216		X			X	
	Groundwater	E-217		X				
	Groundwater	RW-18/36-02		X				
	Groundwater	RW-18/36-04		X				
	Groundwater	RW-18/36-05		X				
	Groundwater	Z3-2		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-8	X		X	X	X	
	Surface Water	NSWSD-7	X		X	X	X	

Table 4-1. Summary of 2012 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]	Comments
SWMU 14, Old Pesticide Storage and Disposal Area	Groundwater	MW14-5	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			
	Groundwater	05-375	X	X	X			
	Groundwater	PP-05	X	X	X			
	Groundwater	R-1	X	X	X			
SWMU 58/SA 73, Heating Plant 6	Groundwater	12-105	X	X	X			
	Groundwater	12-106		X				
	Groundwater	12-114	X	X	X			
	Groundwater	12-121	NC	X	NC			No sample collected due to product thickness > 0.02 ft
	Groundwater	12-124		X				
	Groundwater	12-125		X				
	Groundwater	12-203	X	X	X			
	Groundwater	12-601		X				
	Groundwater	12-604		X				
	Groundwater	12-610		X				
	Groundwater	12-611		X				
SWMU 60, Tank Farm A	Groundwater	LC5A	X	X	X	X	X	
	Groundwater	MW E006	X	X	X		X	
	Groundwater	650	X	X	X	X	X	
	Groundwater	651	X	X	X	X	X	
	Groundwater	652	X	X	X	X	X	
	Groundwater	653	X	X	X	X	X	
	Surface Water	852	X		X	X	X	
	Sediment	852	X		X	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	

Table 4-1. Summary of 2012 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]	Comments
SWMU 61, Tank Farm B (continued)	Sediment	NL-04	X		X		X	
	Surface Water	NL-D-04	X		X	X	X	
	Sediment	NL-D-04	X		X		X	
SWMU 62, New Housing Fuel Leak, Sandy Cove Housing	Groundwater	03-104	X	X	X			
	Groundwater	03-155	X	X	X			
	Groundwater	03-778	X	X	X			
	Groundwater	03-802	X	X	X			
	Groundwater	03-895	X	X	X			
	Groundwater	HMW-102-1		X				
	Groundwater	HMW-146-1		X				
	Groundwater	HMW-146-3	X	X	X			
	Groundwater	MRP-MW2	X	X	X			
	Groundwater	MRP-MW3	X	X	X			
	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	X	X			
	Groundwater	03-107		X				
	Groundwater	03-109	X	X	X			
	Groundwater	03-502	X	X	X			
	Groundwater	03-518		X				
	Groundwater	03-898	X	X	X			
	Groundwater	AMW-704	X	X	X			
	Groundwater	MW14		X				
	Groundwater	MW15		X				
	Groundwater	HMW-303-1		X				

Table 4-1. Summary of 2012 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]	Comments
SWMU 62, New Housing Fuel Leak, Eagle Bay Housing (continued)	Groundwater	HMW-303-2		X				
	Groundwater	HMW-303-3		X				
	Groundwater	HMW-303-4		X				
	Groundwater	HMW-303-9		X				
	Groundwater	HMW-303-10		X				
	Groundwater	HMW-303-11		X				
	Groundwater	MW-303-7	X	X	X			
	Groundwater	MW-303-8		X				
	Groundwater	MW-303-12		X				
	Groundwater	MW-303-14		X				
	Groundwater	RW-303-4		X				
	Groundwater	RW-303-6		X				
	Groundwater	RW-303-7		X				
	Groundwater	RW-303-9		X				
	Groundwater	RW-303-13	X	X	X			
	Groundwater	RW-303-14	X	X	X			
	Groundwater	RW-303-15		X				
	Groundwater	RW-303-16	X	X	X			
	Surface Water	NL-09	X		X	X	X	
	Sediment	NL-09			X		X	
Tanker Shed, UST	Groundwater	04-175	X	X	X			
	Groundwater	04-176		X				
	Groundwater	04-178		X				
	Groundwater	04-290	X	X	X			
	Groundwater	04-301		X				
	Groundwater	04-302		X				
	Groundwater	04-303		X				
	Groundwater	04-304		X				
	Groundwater	04-306	X	X	X			
	Groundwater	04-307		X				
	Groundwater	04-308		X				

Table 4-1. Summary of 2012 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]	Comments
Tanker Shed, UST (continued)	Groundwater	04-309		X				
	Groundwater	04-310		X				
	Groundwater	04-311		X				
	Groundwater	04-312		X				
	Groundwater	04-313		X				
	Groundwater	04-314		X				
	Groundwater	04-317		X				
	Groundwater	04-601	X	X	X			
	Groundwater	TS-03		X				
	Groundwater	TS-04		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 for visible petroleum seeps or sheens.

Table 4-2. Environmental Quantities and Laboratory Analytical Methods for Groundwater, Surface Water, and Sediment Samples by Location

Site Name	Monitoring Type	Location	Sample Matrix	QA/QC Samples	GRO (AK 101)	BTEX (8260C)	Benzene (8260C)	DRO (AK 102)	Total and Dissolved Lead (6020A)	VOCs[1] (8260C)	PAHs (8270D SIM)
Former Power Plant, Building T-1451	MNA	01-118	GW					1			
	MNA	01-150	GW	MS/MSD (DRO)				1			
	MNA/SWP	01-151	GW	MS/MSD (BTEX)		NC		NC			NC
	SWP	NL-08	SW	MS/MSD (DRO)		1		1			1
	SWP	NL-08	SD					1			1
GCI Compound, UST GCI-1	MNA	04-100	GW	Duplicate 04-110	2			1			
	MNA	04-202	GW		1			1			
	MNA	04-204	GW		1			1			
	MNA	04-210	GW		1			1			
	MNA	04-213	GW		1			1			
	MNA	04-701	GW		1						
NMCB	MNA	02-452	GW	Duplicate 02-462	2		1	1			
	MNA/SWP	02-453	GW		1		1	1			
	MNA/SWP	02-455	GW		1		1	1			
	MNA	02-461	GW		1		1	1			
	MNA/SWP	02-478	GW		1		1	1			
	MNA	02-817	GW		1		1	1			
	MNA/SWP	02-818	GW		1		1	1			
	MNA	E-201	GW		1		1	1			
	MNA	NMCB-04	GW		1		1	1			
	MNA/SWP	NMCB-07	GW		NC		NC	NC			
	MNA/SWP	NMCB-08	GW	Duplicate NMCB-18	1		2	2			
	MNA/SWP	NMCB-10	GW		NC		NC	NC			
	MNA/SWP	NMCB-11	GW	MS/MSD (GRO, Benzene)	1		1	1			
	MNA/SWP	NMCB-12	GW		1		1	1			
	SWP	NL-05	SD	MS/MSD (GRO, Benzene)	1		1	1			

Table 4-2. Environmental Quantities and Laboratory Analytical Methods for Groundwater, Surface Water, and Sediment Samples by Location (continued)

Site Name	Monitoring Type	Location	Sample Matrix	QA/QC Samples	GRO (AK 101)	BTEX (8260C)	Benzene (8260C)	DRO (AK 102)	Total and Dissolved Lead (6020A)	VOCs[1] (8260C)	PAHs (8270D SIM)
ROICC Contractor's Area, UST ROICC-7	MNA	08-175	GW				1				
	MNA	08-200	GW				1				
	MNA	08-202	GW				1				
Runway 5-23 Avgas Valve Pit	MNA	14-100	GW		1						
	MNA	14-110	GW		1						
SA 78, Old Transportation Building	MNA	12-145	GW		1		1	1			
	MNA	MW-116	GW					1			
	SWP	12-802	GW		1		1	1			
	SWP	NL-10	SW		NC	NC		NC			NC
	SWP	NL-10	SD		NC	NC		NC			NC
SA 79, Main Road Pipeline, South End	MNA/SWP	02-230	GW					1			
	MNA	601	GW					1			
	MNA	MRP-MW8	GW					1			
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	04-801	GW					1			
	MNA	SP4-3	GW					1			
South of Runway 18-36 Area	MNA/SWP	02-231	GW	Duplicate 02-241		2		2			1
	MNA/SWP	02-232	GW			1					1
	MNA/SWP	AS-1	GW	MS/MSD (PAHs)		1					1
	NR	NSWSD-7	SW	Duplicate NSWSD-17		2		2			2
	NR	NSWSD-8	SW	MS/MSD (BTEX)		1		1			1
	NR	NSWSD-2	SD	Duplicate NSWSD-12				2			1
	NR	NSWSD-4	SD	Duplicate NSWSD-14				1			2
	NR	NSWSD-5	SD	MS/MSD (PAHs)				1			1

Table 4-2. Environmental Quantities and Laboratory Analytical Methods for Groundwater, Surface Water, and Sediment Samples by Location (continued)

Site Name	Monitoring Type	Location	Sample Matrix	QA/QC Samples	GRO (AK 101)	BTEX (8260C)	Benzene (8260C)	DRO (AK 102)	Total and Dissolved Lead (6020A)	VOCs[1] (8260C)	PAHs (8270D SIM)
SWMU 14, Old Pesticide Storage and Disposal Area	MNA	MW14-5	GW	Duplicate MW24-5 MS/MSD (Lead)	1			1	2		
	Compliance	01-153	GW	MS/MSD (VOCs)						1	
SWMU 17, Power Plant No. 3 Area	Compliance	05-735	GW	Duplicate 05-745						2	
	MNA/SWP	05-375	GW					1			
	MNA	PP-05	GW					1			
	MNA	R-1	GW					1			
SWMU 58/SA 73, Heating Plant 6	MNA	12-105	GW					1			
	MNA	12-114	GW					1			
	MNA	12-121	GW					NC			
	MNA	12-203	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	MS/MSD (BTEX)		1		1			1
	MNA	653	GW			1		1			1
	NR	852	SW			1		1			1
	NR	852	SD					1			1
SWMU 61, Tank Farm B	MNA/SWP	14-113	GW		1	1					1
	MNA/SWP	14-210	GW		1	1					
	MNA	TFB-MW4B	GW		1	1					
	SWP	NL-04	SW		1	1					1
	SWP	NL-04	SD	Duplicate NL-14	2	2					
	SWP	NL-D-04	SW		1	1					1
	SWP	NL-D-04	SD	MS/MSD (BTEX)	1	1					

Table 4-2. Environmental Quantities and Laboratory Analytical Methods for Groundwater, Surface Water, and Sediment Samples by Location (continued)

Site Name	Monitoring Type	Location	Sample Matrix	QA/QC Samples	GRO (AK 101)	BTEX (8260C)	Benzene (8260C)	DRO (AK 102)	Total and Dissolved Lead (6020A)	VOCs[1] (8260C)	PAHs (8270D SIM)
SWMU 62, New Housing Fuel Leak, Sandy Cove Housing	MNA	03-104	GW		1	1		1			
	MNA	03-155	GW					1			
	MNA	03-619	GW	MS/MSD (DRO)				1			
	MNA	03-778	GW	MS/MSD (GRO)	1	1		1			
	MNA	03-802	GW					1			
	MNA	03-895	GW	MS/MSD (GRO)	1	1		1			
	MNA	HMW-146-3	GW					1			
	MNA	MRP-MW2	GW		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	1			
SWMU 62, New Housing Fuel Leak, Eagle Bay Housing	MNA	03-103	GW					1			
	MNA/SWP	03-109	GW	MS/MSD (DRO)				1			
	MNA	03-502	GW		1	1		1			
	MNA/SWP	03-898	GW					1			
	MNA/SWP	AMW-704	GW					1			
	MNA	HMW-303-7	GW					1			
	MNA/SWP	RW-303-13	GW					1			
	MNA/SWP	RW-303-14	GW					1			
	MNA/SWP	RW-303-16	GW					1			
	SWP	NL-09	SW		1	1		1			1
	SWP	NL-09	SD		1			1			1
Tanker Shed, UST 42494	MNA	04-175	GW					1			
	MNA	04-290	GW	Duplicate 04-300	1			2			
	MNA	04-306	GW	Duplicate 04-316	2			1			
	MNA/SWP	04-601	GW					1			
Totals					**45**	**28**	**21**	**85**	**2**	**3**	**24**

Note:
[1] PCE, TCE, and daughter products: 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,-2-dichloroethene, and vinyl chloride

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 and jet fuel no. 5 (JP-5) were the most extensively used hydrocarbons on Adak Island. Gasoline is 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 (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). 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 subsection 3 of Sections 7 through 22.

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 of around 11 mg/L), with relatively low specific conductance (0.238 milliSiemens per centimeter [mS/cm]), essentially no ferrous iron (less than 0.01 mg/L) or methane (0.0038 mg/L), relatively little sulfate (2.52 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 is scheduled for 2014. Therefore, 2012 groundwater parameters (DO and ORP) 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 these results is presented for the sites for which MNA is the selected remedy in their respective site sections following Section 6.

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 in accordance with the CMP, Revision 5 (Navy 2012e). Appendix E of this report includes a summary of wells found in need of repair.

Visual inspections were also performed at shoreline locations at nine sites: the Former Power Plant, Building T-1451 (East Canal); NMCB; SA 78, Old Transportation Building; SA 79, Main Road Pipeline; South of Runway 18-36 Area; SWMU 58/SA 73, Heating Plant 6; SWMU 60, Tank Farm A; SWMU 61, Tank Farm B; and SWMU 62, New Housing Fuel Leak Area (East Canal). Locations of the shoreline visual inspection are presented in Table 4-3 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 4-3. Visual inspection information from surface water and sediment sample locations are also included in Table 4-3.

The length of East Canal was inspected from the SWMU 62, New Housing Fuel Leak Area product recovery trench to the southern-most point of the canal at the exit culverts that flow into West Canal. This stretch of shoreline encompasses two sites: SWMU 62, New Housing Fuel Leak Area and Former Power Plant, Building T-1451. The two petroleum seeps were observed in East Canal at the SWMU 62 free product recovery trench (booms 2, 3, and 8), and approximately 85 feet further downstream from booms 9/12 (boom 11). The oil-adsorbent booms are being maintained monthly at these locations (2, 3, 8, 9/12, and 11) to control migration of sheen. Oil-stained sediments, pooled free product, petroleum odor, and surface water sheen were observed at these seeps. Remedial activities were performed along the East Canal shoreline at the former seep downgradient of the Former Power Plant, Building T-1451 (boom 9/12), which included removal of petroleum-impacted soil and sediment and replacement with amended clean fill.

Table 4-3. 2012 Seep and Shoreline Visual Inspection Results

Site	Water Body	Shoreline Location	Observation[1]			Comments
			Seep	Odor	Sheen or Discolor	
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	Newly remediated shoreline at boom location 9/12. Small amounts of sheen along remediated shoreline. Petroleum seep at boom 11 is located 75 feet south of boom 9/12 and is approximately 35 feet long. Moderate petroleum odor, oily sediments
			No	Yes	Yes	Surface water/sediment sample NL-08 was collected downgradient of boom 11. Iron staining, petroleum odor, and light sheen noted on water. Sheen noted when sediment was disturbed.
NMCB Expanded Area	Sweeper Cove	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 78, Old Transportation Building	Clam Lagoon	Between wells 12-801 and 12-802	No	No	No	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	No	Yes	Black-stained sediments (4 ft by 2 ft) were observed just south of the Moffett Road Bridge. Several sections of the shoreline downgradient of the site contained black-stained sediment just beneath the surface which released sheen when disturbed.
			No	Yes	Yes	Sediment sample NSWSD-2. Black sediment with light sheen and moderate petroleum odor.
			No	No	No	Sediment sample NSWSD-4. No contamination observed.
			No	Yes	Yes	Sediment sample NSWSD-5. Black sediment and heavy sheen noted when sediment was disturbed. Heavy petroleum odor.

Table 4-3. 2012 Seep and Shoreline 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	No	No	Surface water sample NSWSD-7. No contamination observed.
			No	No	No	Surface water sample NSWSD-8. No contamination observed.
SWMU 58/SA 73, Heating Plant 6	Unnamed perennial stream	From top of ravine to well 12-804	No	No	No	No contamination observed.
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 observed near the culvert in Sweeper Creek Lagoon (boom 10). Iron staining, odor, and sheen observed at seep.
			Yes	Yes	Yes	Surface water/sediment sample 852. Moderate odor of petroleum and sheen observed on surface water. Black sediment noted with sheen and heavy petroleum odor when disturbed.
SWMU 61, Tank Farm B	Southern shoreline of North Sweeper Creek	Between avgas pipeline and surface water sample location NL-D-04	No	No	No	No contamination observed.
			No	No	No	Surface water/sediment sample NL-04 collected downgradient of well 14-113. No contamination observed.
			No	No	No	Surface water/sediment sample NL-D-04 collected downstream of NL-04 immediately upstream of confluence of unnamed stream. No contamination observed.
SWMU 62, New Housing Fuel Leak Area	East Canal	Between SWMU 62 free product recovery trench boom locations 8 and 9.	Yes	Yes	Yes	Petroleum seep along shoreline at boom 8 downgradient of product recovery trench approximately 3 feet by 120 feet in length. Sheen, pooled petroleum, black oily sediments, iron staining, stressed vegetation, and strong petroleum odors observed.
			No	Yes	Yes	Surface water/sediment sample NL-09 collected downgradient of boom 8. Moderate petroleum odor and light sheen observed. Light sheen observed when sediment was disturbed.

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

As a result, the amount of petroleum seeping at this location has diminished greatly. Only small amounts of sheen were observed during the 2012 LTM activities. A description of each petroleum seep is presented in Table 4-3.

East Canal

Three areas of petroleum seeps are present along the East Canal eastern shoreline at which booms are being maintained to control surface sheen. One large petroleum seep affecting approximately 120 feet of shoreline 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 periodically 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 2012 shoreline inspection. Periodic free product recovery is currently ongoing in several upgradient wells at the SWMU 62, New Housing Fuel Leak, Eagle Bay site.

The other two seeps are located further south downgradient of Former Power Plant, Building T-1451. Booms 9/12 and 11 are being maintained at that location. Remedial activities were performed at the seep 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 markedly decreased. During the shoreline inspection in September 2012, no oily sediments were noted and only light sheen and odor were observed at this location.

One smaller petroleum seep is located approximately 75 feet downgradient of boom 9/12 where boom 11 is being maintained. This seep affects approximately 35 feet of the shoreline of East Canal. Black-stained oily sediments, moderate petroleum odor and sheen were observed at this location during the 2012 inspection. In general, booms are effective in preventing the migration of sheen to downgradient surface waters; this is described in further detail in the Remedial Action Summary Report for Free Product Recovery (Navy 2012f).

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). Surface water collected from NL-08 exceeded endpoint criteria for GRO, TAH and TAqH but at concentrations lower than those observed in 2011. DRO was detected in sediment from location NL-08 at lower concentrations than in 2011 but which still exceeded endpoint criteria.

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 northwestern shoreline of the lagoon downgradient of SWMU 60, Tank Farm A, well LC5A. This seep is characterized by oily sediments, sheen on surface water, heavy petroleum odors, and iron staining which were noted during the shoreline inspection performed in 2012. Boom 10 is maintained at this location to prevent migration of sheen to downgradient surface waters. 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 fell below endpoint criteria for the first time since 2008. However, DRO concentrations in sediment rose from 1,400 mg/kg in 2011 to 10,000 mg/kg in 2012. Due to the minus tide, the surface water sample was collected approximately 75 feet from the seep where the sediment portion was collected. Periodic free product recovery is currently ongoing 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-adsorbent 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 for Free Product Recovery [Navy 2012f] for more details).

During the shoreline inspection, one small area of black-stained sediment (4 ft by 2 ft) was observed just south of the Moffett Road Bridge. Several sections of the shoreline downgradient of the site contained black-stained sediment just beneath the soil surface which released sheen when disturbed. 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 first 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 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 any 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 2012. Monthly 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 in wells 02-230 and MRP-MW8. No evidence of petroleum contamination was observed during the inspection.

Clam Lagoon

A shoreline inspection was performed at SWMU 58/SA 73, Heating Plant 6 of the on-site perennial stream from the top of the ravine to downgradient of well 12-804. This stream flows into Clam Lagoon but during the inspection had no free-flowing water. This inspection was performed because 0.01 feet of free product was observed in surface water protection well 12-601 in 2009. No evidence of petroleum contamination was observed during this inspection. Monthly product recovery ceased at this site in 2012 as per the 2012 Annual Groundwater Monitoring Report (Navy 2012c) recommendations.

A shoreline inspection was performed at SA 78, Old Transportation Building of the Clam Lagoon shoreline between wells 12-801 and 12-802. This stream flows into Clam Lagoon but during the inspection had no free-flowing water. This inspection was performed because free product was observed in surface water protection well 12-802 in 2009. No evidence of petroleum contamination was observed during this inspection; therefore, surface water and sediment sample NL-10 was not collected per the CMP, Revision 5 (Navy 2012e).

North Sweeper Creek

A shoreline inspection of North Sweeper Creek was performed in 2012 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 locations NL-04 and NL-D-04. No surface water exceeded endpoint criteria. No target analytes were detected in the sediment collected at NL-04 and NL-D-04, although the GRO detection limits were elevated due to the high moisture content of the sample.

Shoreline inspections are also discussed in the respective site sections following Section 6.

4.1.4 Environmental Sampling

Groundwater samples were collected from 83 monitoring wells during the sampling event. Surface water was collected from seven locations, and sediment samples were collected from nine locations. All samples were collected in accordance with the CMP, Revision 5 (Navy 2012e).

The purpose of monitoring at each well location is specified in Table 2-6. 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.

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 the 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). 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 2012 LTM event no product was observed exceeding these thicknesses. The majority of site wells that were monitored were 2 inches in diameter. 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 2012e) and in the revised CMP Appendix A and B tables (Navy 2012b).

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 chain-of-custody procedures were used:

- Sampling information was recorded in field logbooks and field data forms. This information included identifying information, such as project code, sample identification names, sample location, date, time, name of samplers, field observations, and remarks.
- Samples were collected per applicable Navy SOPs. 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 transferred or dispatched 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 (DOT) 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 of airline inspections that 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 temperature exceedance.

Samples were prepared and analyzed within holding times, with three exceptions. The samples collected from wells 14-113, MRP-MW2, and MRP-MW3 were analyzed one or two days past the 14-day holding time for BTEX. However, the missed hold times did not appear to affect sample results which were consistent with previous analytical data. These samples are scheduled to be collected again in 2013. The holding time exceedances were assessed during third-party data validation and discussed in the applicable data validation reports provided in Appendix F. The reported data for the sample were qualified as estimated and deemed acceptable by the third-party data validation firm, Laboratory Data Consultants (located in Carlsbad, California). 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 Alaska approved methods. Routine procedures used for measuring precision and accuracy include analyses of quality control (QC) samples including field duplicate samples, matrix spike/matrix spike duplicate (MS/MSD) sets, and method blanks. Laboratory QC checks were the responsibility of the contracted laboratory. Environmental and QC samples collected during the field program were sent to Columbia Analytical Services in Kelso, Washington for quantitative analyses. A summary of chemical analyses used by sample location is presented in Table 4-2.

To achieve compliance sampling requirements at some sites, TAH and TAqH analyses were performed as specified in the CMP, Revision 5 (Navy 2012e). 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 2012d). Approximately 15 gallons of non-regulated purge water (from non-CERCLA sites) was filtered through a granulated activated carbon filter and was sampled (sample IDW-PETRO-2012) for toxicity characteristic leaching procedure (TCLP) compounds and petroleum site contaminants of concern. Similarly, approximately 5 gallons of purge water from non-landfill CERCLA sites was filtered through a granulated activated carbon filter and sampled (sample IDW-CERCLA-2012) for TCLP compounds and non-landfill 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 2012d), pending analysis and disposal.

Analytical results from samples IDW-PETRO-2012 and IDW-CERCLA-2012 (included in Appendix F) showed that all contaminants of concern were below hazardous waste criteria and endpoint criteria for no unacceptable risk sites (10 times cleanup 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 2012d).

5. DEVIATIONS

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

Because of the presence of free product in the well greater than 0.02 feet in thickness, the following four monitoring wells were not sampled as scheduled:

- NMCB Building T-1416, wells 02-818, NMCB-07, and NMCB-10
- SWMU 58/SA 73, Heating Plant 6, well 12-121

At Former Power Plant, Building T-1451, well 01-151 had been removed during remediation activities conducted by the Navy Petroleum Sites Program in July 2012 and therefore, sampling was not performed. This well had been located at the shoreline of East Canal downgradient from the site.

Surface water/sediment sample NL-10 was not collected along the shoreline of Clam Lagoon downgradient of the SA 78, Old Transportation Building site because no petroleum contamination was observed during the shoreline inspection.

One Field Change Request was submitted to amend the Waste Management Plan (Navy 2012d) which was approved by the Navy. Since the only metal of concern for the CERCLA sites was lead, it was not necessary to analyze the drummed purge water from these sites for aluminum and the other 12 priority pollutant metals as prescribed in the plan for waste characterization. Therefore, the metals analysis of this sample was reduced to total lead only.

Groundwater monitoring activities were not performed at SWMU 25, Roberts Landfill as per the recommendations in the 2011 Landfill Monitoring Report. Surface water monitoring also was not performed at SWMU 25, Roberts Landfill due to a misunderstanding in monitoring frequency between the Navy and ADEC. Both groundwater and surface water monitoring at SWMU 25 will be performed in 2013 as prescribed in the CMP, Revision 5.

6. DATA QUALITY ASSESSMENT

This section evaluates the quality of laboratory and field data. Data quality goals are specified in the CMP, Revision 5 (Navy 2012e) and the revised CMP tables (Navy 2012b). 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 2012 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, chain-of-custody process, 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. Laboratory Data Review Checklists were completed and are 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 2012e) specifies that field duplicates and MS/MSDs be collected at a rate of 1 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 1 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:

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

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 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 criteria of 50 percent specified in the CMP, Revision 5 (Navy 2012e). As shown in Tables G-1 and G-2 of Appendix G, the RPD values for six paired data points for the field duplicate sets were greater than the criteria. For the remaining 61 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 the average 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. Sample 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 2012 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 2012, data for samples that were collected and submitted for laboratory analysis were validated by a third-party validation firm. Several samples were analyzed more than once for a particular analyte. In these cases, the validation firm selected a preferable result and rejected the less preferable result. A usable result for each analyte was obtained for each sample during this process. 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 2012 monitoring event, four 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 sediment. At one location, NL-10 at SA 78, Old Transportation Building, no surface water or sediment samples was collected because contamination was not observed. Finally, groundwater could not be collected at well 01-151 at Former Power Plant, Building T-1451 because the well had been removed during remedial activities in July 2012.

Overall completeness for the 2012 groundwater sampling program for each analytical method per site is summarized in Appendix G, Table G-3. 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 a surface water and sediment location was present or absent) was obtained at five locations that were not sampled. Thus, completeness did not impact data quality.

Per the data validation reports (Appendix F), the 2012 data met the quality goals established in the CMP, Revision 5 (Navy 2012e) and the revised CMP tables (Navy 2012b). 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 using 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. Laboratory-reported analytical results were provided in

appropriate and consistent units with the appropriate method detection limit and reporting limit (also referred to as a quantitation limit). The detection limits provided by the laboratory met the goal to be less than the specified endpoint criteria, with two exceptions. The exceptions were the GRO detection limits for the sediment samples collected at locations NL-04 and NL-D-04 at SWMU 61, Tank Farm B, which were greater than the endpoint criteria due to high water content in the samples.

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 2012 LTM field event.

The representativeness of data generated for this project was evaluated by performing Level 4 validations. Representativeness was evaluated, in part, by examining the chain-of-custody paperwork and verifying that the sample analyses were performed within the specified holding time. No custody issues were identified during data validation. With the exception of three samples for BTEX (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. 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 2012. MNA is the remedy selected for this site (Navy et al. 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), 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.

7.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at three monitoring wells on September 1, 2012. 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 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.

Two monitoring wells were sampled on September 1, 2012. Surface water protection monitoring well 01-151 was not sampled as planned because it had been removed during the remediation activities conducted in July 2012 under the Navy's Petroleum Sites Program. Field measurements were recorded on the 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. A review of the sampling data reported for this site indicates that groundwater parameters stabilized at both monitoring wells. Free product was not observed in either well during the annual 2012 LTM field event.

Table 7-1. 2012 Field Measurements for Former Power Plant, Building T-1451

Well Location	Physical Measurements				Groundwater Parameters						
	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	16.62	3.06	0	6.29	0.650	106.0	0.00	6.48	0.0	-60
01-150	22.68	20.04	2.64	0	6.12	0.484	28.7	0.00	6.95	0.0	4
01-151	Well removed during July 2012 petroleum sites remediation activities.										
Surface Water Sample											
NL-08	NA	NA	NA	NA	6.59	0.840	11	9.44	13.90	0.0	-41

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.

The eastern shoreline of East Canal was inspected from the former location of well 01-151 to the southern-most point of the canal at the exit culvert (Crossover Canal) that flows into West Canal (Figure 7-1). Two petroleum shoreline seeps are located in East Canal downgradient of the Former Power Plant site. Adsorbent booms (boom locations 9/12 and 11) have been placed at the seeps to prevent the migration of sheen downstream and are maintained monthly. Free product recovery operation and maintenance activities are summarized in the Remedial Action Summary Report, Free Product Recovery, Adak (Navy 2012f).

In July 2012, the Navy conducted remedial activities at this site as part of the Navy's Petroleum Sites Program. Activities included removal of petroleum-impacted soils and replacement of approximately 100 feet of East Canal shoreline with amended clean fill. As a result, the flow of the petroleum seep located at boom 9/12 has markedly decreased. During the shoreline inspection in September 2012, no oily sediments were noted and only light sheen and odor were observed at this location.

One smaller petroleum seep is located approximately 75 feet downgradient of boom 9/12 where boom 11 is being maintained. This seep affects approximately 35 feet of the shoreline of East Canal. Black-stained oily sediments, moderate petroleum odor and sheen were observed at this location during the 2012 inspections. In general, booms are effective in preventing the migration of sheen to downgradient surface waters; this is described in further detail in the Remedial Action Summary Report for Free Product Recovery (Navy 2012f).

One surface water and sediment sample (NL-08) was collected downgradient of the southern-most boom (boom 11) to determine the effectiveness of adsorbent booms (Figure 7-1). Iron staining, petroleum odor, and light sheen were noted on the surface water. Petroleum sheen was observed when the sediment was disturbed during sampling. Results of shoreline inspections are summarized in Section 4.1.3.

7.2 TARGET ANALYTE RESULTS

The groundwater samples collected from monitoring wells 01-118 and 01-150 were analyzed for DRO. Monitoring wells 01-118 and 01-150 are located within a dissolved petroleum plume and downgradient of the former petroleum-release area but upgradient 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 7-1 shows the locations of the sampling locations and the analytical results that exceed the applicable endpoint criteria. Table 7-2 presents groundwater results for the 2004 through 2012 events. Tables 7-3 and 7-4 present the surface water and sediment analytical results, respectively. The analytical results obtained for these locations from 1999 through 2012 are summarized in Appendix C. Laboratory reports presenting the 2012 results are provided in Appendix F.

Table 7-2. Analytical Results for Petroleum-Related Chemicals at Former Power Plant, Building T-1451

Well Location	Year	DRO (µg/L)
01-118	2004	**7,080**
Plume Source Area	2005	**11,200 J**
	2006	**8,700**
	2007	**7,000 Y**
	2008	**9,300 Y**
	2009	**8,700 Y**
	2010	**7,100 Y**
	2011	**10,000 Y**
	2012	**9,400 YJ**
01-150	2004	394
Downgradient	2005	927 J
	2006	1,400
	2007	1,100 Y
	2008	**3,400 Y**
	2009	1,100 Y
	2010	1,300 Y
	2011	1,400 Y
	2012	1,300 YJ
Endpoint Criteria		1,500

Notes:
Bold indicates reported concentration is greater than the endpoint criteria or water quality standard.

Table 7-3. 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
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 reporting 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 reporting 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 7-4. 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
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.

DRO was detected above the endpoint criteria of 1,500 µg/L in groundwater collected from wells 01-118 (9,400 µg/L) but below the endpoint criteria in well 01-150 (1,300 µg/L).

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). Indeno(1,2,3-cd)pyrene was not detected in the surface water sample.

DRO was detected in sediment sample NL-08 at 170 mg/kg, which was greater than the endpoint criteria of 90.6 mg/kg. No other compound was detected in this sample above endpoint criteria.

7.3 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 2012 LTM event, which are presented in Table 7-1, provide evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and depleted dissolved oxygen (0.0 mg). A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

7.4 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 for only analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. Sen's slope was calculated only when decreasing trends were observed. Results of the statistical evaluations are summarized in Table 7-5. 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 stable values with no trend at the 80 and 95 percent confidence intervals.

7.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring performed at the Former Power Plant, Building T-1451 site in 2012. The conclusions are as follows:

- Groundwater Flow: Based on the water levels measured in 2012, the approximate groundwater flow direction at the site is to the west, toward East Canal.
- MNA: The groundwater parameters obtained during the 2012 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- No free product was detected in either well at this site in 2012.
- 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 nine monitoring events. The Mann-Kendall trend evaluation performed on the DRO data collected between 2002 and 2012 did not exhibit a trend at the 80 or 95 percent confidence intervals.
- Well 01-150: The DRO concentration exceeded endpoint criteria in 2008 but has been below the endpoint criteria for the last four years.

- Well 01-151: This well was removed during the Navy's remedial activities in July 2012; therefore, sampling was not performed.
- 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 (see Section 4.1.3). The previously documented petroleum seep at boom 9/12 has undergone remediation and oily shoreline soils have been replaced with amended clean fill. Only small amounts of sheen and a light petroleum odor were observed to remain at this location in 2012.
- 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 collected from this location did not exceed endpoint criteria in 2012. However, DRO was detected in the sediment at 170 mg/kg, which was greater than the endpoint criteria of 90.6 mg/kg. No active petroleum seep was observed at this sampling location, but odor and sheen were observed when sediment was disturbed during sampling.

7.6 RECOMMENDATIONS

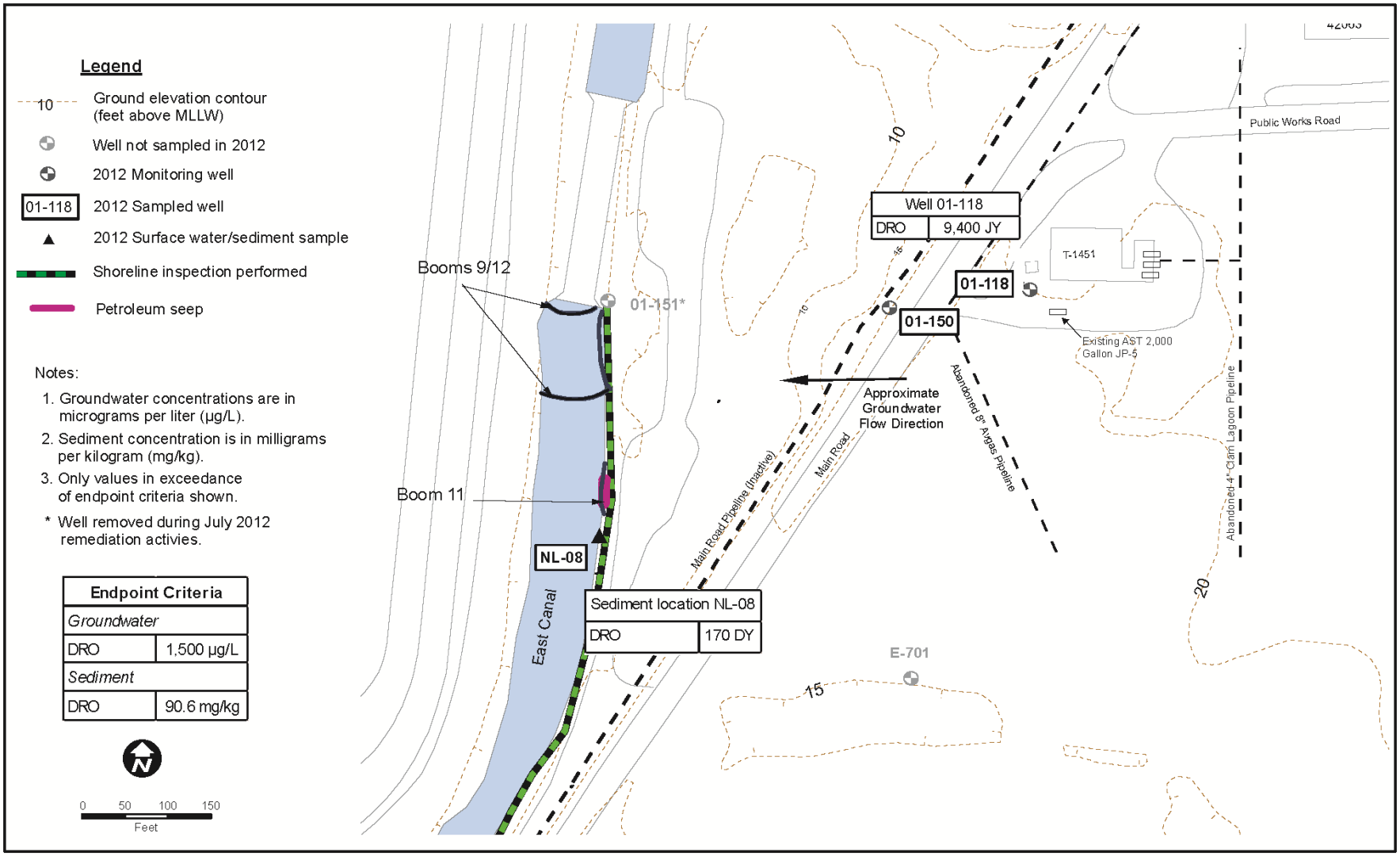
DRO concentrations remain above the endpoint criteria in the groundwater sample collected from well 01-118; therefore, monitoring should continue at this site as prescribed in the CMP, Revision 5 (Navy 2012e). DRO concentrations have been observed below endpoint criteria in well 01-150 for the last four sampling events. However, it is recommended that monitoring continue at this well because it is located downgradient of the source plume. Because an oil seep is located downgradient of this site in East Canal, shoreline inspections of East Canal should continue to be conducted annually. The newly replaced shoreline should also continue to be monitored and boom 9/12 maintained to ensure the treatment remains effective. Also, surface water (analyzed for DRO, TAH, and TAqH) and sediment sampling (analyzed for DRO and PAHs) should continue in East Canal downstream of boom 11 (location NL-08) as prescribed in the CMP, Revision 5 (Navy 2012e).

The wells newly installed at this site during the summer of 2012 are recommended to be added to the monitoring program. Because remedial actions occurred at this site in 2012, it is recommended that all monitoring at this site be continued as prescribed for one more year and that reduction of monitoring to every odd year be re-evaluated based on 2013 results.

Table 7-5. 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	10,000Y	1,500	10	-2	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 7-1 Former Power Plant, Building T-1451 Sample Locations	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

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8. GCI COMPOUND, UST GCI-1

This section presents the results of groundwater monitoring performed at the GCI Compound, UST GCI-1 site during 2012. The remedy specified for this site in the OU A ROD is free product recovery (Navy et al. 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.

8.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at nine monitoring wells on the site on September 3, 2012. Table 8-1 provides the measured depths to water (corrected for product thickness, if present), calculated groundwater elevations, and if present the product thickness. Figure 8-1 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 2012 are representative of this shallow water table. The water level data indicate that the direction of groundwater flow in the main aquifer beneath the site is to the west, toward East Canal. Product was observed in two wells, 04-201 and 04-202 at trace levels and 0.01 feet, respectively.

Groundwater sampling was performed at six monitoring wells on September 3 and 4, 2012. Field measurements were recorded on the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 8-1 presents the final field measurements recorded prior to sample collection.

Table 8-1. 2012 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	28.11	4.69	0	6.36	0.301	45.1	0.00	5.81	0.0	-34
04-201	30.61	25.63	4.98	Trace	NP	NP	NP	NP	NP	NP	NP
04-202	30.90	25.76[1]	5.14[1]	0.01	6.22	0.248	77.6	0.66	6.69	0.0	-13
04-203	31.13	26.27	4.86	0	NP	NP	NP	NP	NP	NP	NP
04-204	30.82	25.68	5.14	0	6.44	0.223	39.6	0.00	6.56	0.0	-17
04-210	29.22	24.72	4.50	0	6.35	0.284	7.7	0.00	5.64	0.0	-36
04-211	28.45	23.75	4.70	0	NP	NP	NP	NP	NP	NP	NP
04-213	28.70	23.76	4.94	0	6.25	0.246	41.6	0.00	6.41	0.0	-25
04-701	18.19	14.13	4.06	0	6.39	0.297	32.5	0.00	6.58	0.0	-31

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.

Groundwater parameters stabilized at all monitoring wells except wells 04-100, 04-202, and 04-701. Because groundwater parameters did not stabilize in these wells, three casing volumes of groundwater were removed prior to sampling per CMP Revision 5 (Navy 2012e). The 2012 analytical results in these wells are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

8.2 TARGET ANALYTE RESULTS

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

Figure 8-1 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 04-204 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 8-2 summarizes the analytical results. The historical analytical results obtained for these locations are summarized in Appendix C. Laboratory reports presenting the 2012 results are provided in Appendix F.

GRO was detected above the endpoint criteria of 1,300 µg/L in samples collected from wells 04-100 (3,800 µg/L), 04-202 (3,400 µg/L), 04-210 (6,300 µg/L), and 04-213 (3,900 µg/L). DRO was not detected above the endpoint criteria of 1,500 µg/L in any of the samples collected from site wells.

8.3 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 2012 LTM event, which are presented in Table 8-1, 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 8-2. Analytical Results for Petroleum-Related Chemicals for GCI Compound, UST GCI-1

Well Location	Year	DRO (µg/L)	GRO (µg/L)
04-100	2004	376	**5,300J**
Downgradient	2005	440 J	**4,420 J**
	2006	370	**5,200 J**
	2007	210 Y	**4,400 Y**
	2008	270 Z	**4,000 Z**
	2009	NP	**4,400 Z**
	2010	NP	**3,100 Y**
	2011	NP	**2,900 Y**
	2012	230 L	**3,800 Y**
04-202	2002	660	**5,100**
Plume Source Area	2005	**FP**	**FP**
	2006	NP	**FP**
	2007	**FP**	**FP**
	2008	NP	**4,400 Y**
	2009	NP	**5,200 Y**
	2010	NP	**3,300 Y**
	2011	**FP**	**FP**
	2012	870 L	**3,400 Y**
04-204	2006	68	230
Upgradient	2007	NP	380 Y
	2008	NP	230 Y
	2009	NP	250 Z
	2010	**1,700 Y**	300 Y
	2011	**3,200 Y**	410 Y
	2012	360 YJ	200 Y
04-210	2002	420	**5,000**
Downgradient	2005	NP	**4,580 J**
	2006	NP	**6,400**
	2007	NP	**8,300 DY**
	2008	NP	**6,100 Y**
	2009	NP	**6,800 Y**
	2010	NP	**4,800 Y**
	2011	NP	**4,700 Y**
	2012	430 L	**6,300 Y**
04-213	2006	170	**3,800 J**
Plume Edge	2007	NP	**5,900 Y**
	2008	NP	**6,900 Z**
	2009	NP	**4,400 Z**
	2010	NP	**3,300 Y**
	2011	NP	**4,000 Y**
	2012	140 LJ	**3,900 Y**
04-701	2004	NP	199
Downgradient	2005	NP	547
Plume Edge	2006	NP	420 J
	2008	NP	700 Y
	2010	NP	230 Y
	2012	NP	100 Y
Endpoint Criteria		1,500	1,300

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

8.4 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 for only 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 8-3. 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 percent confidence interval. Sen's evaluation also indicates a statistically significant decreasing trend, with a median slope of -188.
- Wells 04-202, 04-210, and 04-213: The GRO concentrations exhibit no trend at either the 80 or 95 percent confidence interval. The coefficients of variation indicate the concentrations are stable.

8.5 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 2012. The conclusions are as follows:

- Groundwater Flow: Based on the field measurements in 2012, the interpreted groundwater flow direction is to the west.
- MNA: The groundwater parameters obtained during the 2012 LTM event support evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Product was observed in two wells at this site in 2012. Product was measured in well 04-201 at trace levels and in well 04-202 at a thickness of 0.01 feet.
- DRO was analyzed in all wells in 2012 for the first time but did not exceed endpoint criteria in any well.
- Well 04-100: This well is located within the contaminant plume. DRO concentrations were below endpoint criteria. The GRO concentration in 2012 exceeded the endpoint criteria. Mann-Kendall trend and Sen's evaluation performed on the GRO data collected between 2003 and 2012 indicates the concentration is decreasing with a statistical significance with an 80% degree of confidence.

- Well 04-202: This well is located within the contaminant plume. DRO concentrations were below endpoint criteria. The GRO concentration in 2012 exceeded the endpoint criteria. Mann-Kendall performed on the GRO data collected between 2002 and 2012 indicates the concentration is stable with no trend at both the 80 and 95 percent confidence intervals.
- Well 04-204: This well is located upgradient 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 (seven consecutive events). Groundwater was analyzed for DRO in this well beginning in 2010 after the presence of 0.01 feet of free product was observed here in 2009. The DRO concentration exceeded endpoint criteria in both 2010 and 2011 but dropped below endpoint criteria in 2012.
- Well 04-210: This well is located within the contaminant plume. DRO concentrations were below endpoint criteria. 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 2012 indicates no concentration trend at the 80 or 95 percent confidence interval and a stable concentration.
- Well 04-213: This well is located within the contaminant plume. DRO concentrations were below endpoint criteria. GRO has been detected above the endpoint criteria since 2006, when sampling began at this well. The trend evaluation performed on GRO data indicates a stable concentration with no statistical trend at either the 80 or 95 percent confidence interval.
- Well 04-701: GRO has been detected below the endpoint criteria in this downgradient well since 2006, when sampling began.

8.6 RECOMMENDATIONS

DRO was observed above endpoint criteria in 2010 and 2011 at upgradient well 04-204; therefore, DRO was added to analytical suite for all but one well in 2012 to determine if DRO was prevalent across the site. No groundwater sample analyzed for DRO was found to exceed endpoint criteria in 2012. This suggests that the DRO observed in well 04-204 in 2010 and 2011 was not from onsite sources. It is possible that the presence of DRO in this well was from an upgradient source, such as the 2009 decommissioning of the Main Road

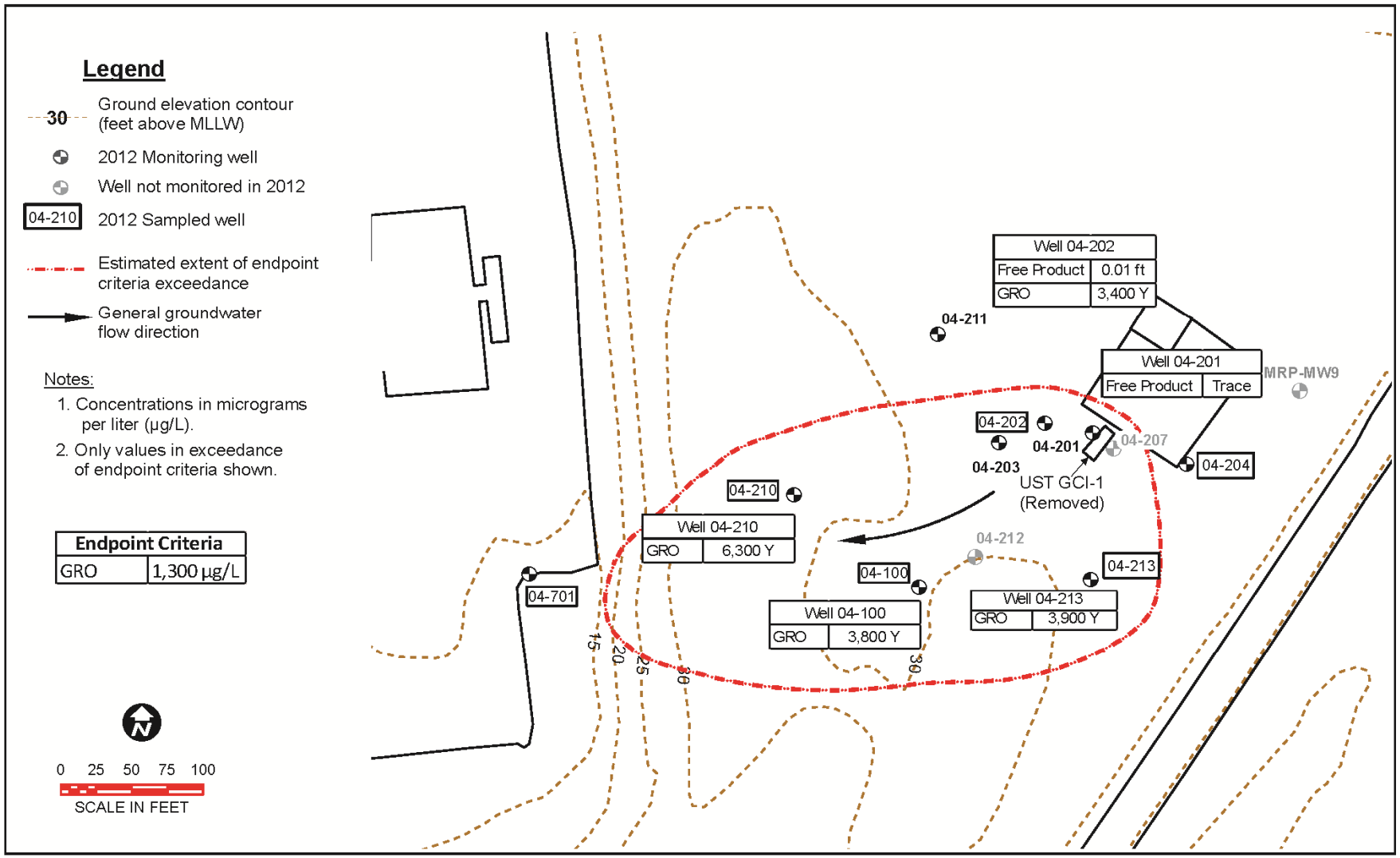
Pipeline which has since dissipated. Therefore, it is recommended that DRO sampling at this site be discontinued.

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 reduced to every odd year with the next monitoring to occur in 2013.

Table 8-3. 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	1,300	10	-18	Decreasing	No trend	NA	-188	Yes	-325	-5
04-202	GRO	Yes	3,400 Y	1,300	5	-4	No trend	No trend	Stable	NC	NC	NC	NC
04-210	GRO	Yes	6,300 Y	1,300	9	0	No trend	No trend	Stable	NC	NC	NC	NC
04-213	GRO	Yes	4,000 Y	1,300	7	-5	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 8-1 GCI Compound, UST GCI-1 Sample Locations	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

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9. 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 2012. 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 (FFS) 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 2006d). 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.

9.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at 25 monitoring wells on August 28, 2012. Field measurements were recorded in the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 9-1 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). Figure 9-1 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 9-1. 2012 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	10.37[1]	1.62[1]	0.69	NP	NP	NP	NP	NP	NP	NP
02-301	14.87	12.67	2.20	0	NP	NP	NP	NP	NP	NP	NP
02-451	10.99	9.25	1.74	0	NP	NP	NP	NP	NP	NP	NP
02-452	11.94	9.68	2.26	0	6.49	0.713	0	0.92	8.53	0.0	-107
02-453	11.68	9.58	2.10	0	6.53	3.00	13	0.00	8.91	0.0	-93
02-455	14.08	12.40	1.68	0	6.59	19.7	14.6	0.06	8.24	1.1	-22
02-461	9.41	7.13	2.28	0	6.31	0.642	4	3.41	8.07	0.0	-73
02-463	12.58	10.12	2.46	0	NP	NP	NP	NP	NP	NP	NP
02-478	10.24	8.20	2.04	0	6.15	0.683	32.2	0.00	7.28	0.0	-104
02-479	16.25	12.97	3.28	0	NP	NP	NP	NP	NP	NP	NP
02-497	9.15	7.34[1]	1.81[1]	0.08	NP	NP	NP	NP	NP	NP	NP
02-815	16.35	14.27[1]	2.08[1]	0.05	NP	NP	NP	NP	NP	NP	NP
02-816	12.86	11.00	1.86	0	NP	NP	NP	NP	NP	NP	NP
02-817	12.49	10.33	2.16	0	6.26	0.794	0	0.00	7.84	0.0	-102
02-818	11.55	9.15[1]	2.40[1]	0.05	FP	FP	FP	FP	FP	FP	FP
02-819	10.03	7.67	2.36	0	NP	NP	NP	NP	NP	NP	NP
E-201	15.54	13.55	1.99	0	6.41	0.298	15	1.94	6.06	0.0	-99
NMCB-04	14.49	12.33	2.16	0	6.41	0.277	13	0.00	7.45	0.0	-66
NMCB-05	6.31	4.95	1.36	0	NP	NP	NP	NP	NP	NP	NP
NMCB-07	11.85	10.26[1]	1.59[1]	0.37	FP	FP	FP	FP	FP	FP	FP
NMCB-08	8.52	9.65	-1.13	0	6.61	2.08	8	0.00	8.17	0.0	-112
NMCB-09	11.96	10.09	1.87	0	NP	NP	NP	NP	NP	NP	NP
NMCB-10	12.95	11.24[1]	1.71[1]	0.21	FP	FP	FP	FP	FP	FP	FP
NMCB-11	12.05	9.87[1]	2.18[1]	0.01	6.53	8.32	0.0	0.00	7.29	0.4	-65
NMCB-12	16.27	14.54	1.73	0	6.54	0.620	13.9	0.00	7.00	0.0	-72

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 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. The wells along the Sweeper Cove shoreline are influenced by tidal fluctuations.

A total of 11 groundwater samples were collected from onsite wells on August 29, 2012. A review of the sampling data reported for this site indicates that groundwater parameters stabilized at all monitoring wells except 02-455 and E-201 which required the removal of three casing volumes of groundwater prior to sampling per CMP Revision 5 (Navy 2012e). The 2012 analytical results in these wells are consistent with past analytical results and appear to be unaffected by the lack of stabilization. Table 9-1 lists the final water quality parameters measurements recorded at each monitoring well prior to sample collection.

Measurable free product was detected in wells 02-818 (0.05 feet), NMCB-07 (0.37 feet), and NMCB-10 (0.21 feet). Therefore, sampling was not performed at these wells as planned per the CMP. Measureable free product was also observed in wells 02-300 (at a thickness of 0.69 feet), 02-497 (at a thickness of 0.08 feet), 02-815 (at a thickness of 0.05 feet), and NMCB-11 (at a thickness of 0.01 feet). Monthly product recovery activities were performed at this site from October 2011 through September 2012. Approximately 0.82 gallons of free product was removed from site wells during this time period (see Appendix J).

An inspection was conducted along the shoreline of Sweeper Cove between wells 02-451 and 02-479 (Figure 9-2). 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 analyses of DRO, GRO, and benzene. Results of shoreline inspections are summarized in Section 4.1.3.

9.2 TARGET ANALYTE RESULTS

Eleven groundwater samples were collected and analyzed for DRO, GRO, and benzene. A sediment sample NL-05 was collected from the shoreline downgradient of well NMCB-07 and also analyzed for DRO, GRO, and benzene. Figure 9-1 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 designated on Figure 9-1. Table 9-2 presents the groundwater analytical results since 2006 for all site monitoring wells. Table 9-3 presents the sediment analytical results. The historical analytical results obtained for these locations are summarized in Appendix C. Laboratory forms presenting the 2012 results are provided in Appendix F.

DRO, GRO, and benzene were not detected above their respective endpoint criteria of 15,000 µg/L, 13,000 µg/L, and 50 µg/L, respectively, in any groundwater samples collected in 2012. GRO and benzene were not detected above method detection limits their respective endpoint criteria in sediment sample NL-05 and DRO was not detected above its respective endpoint criteria of 90.6 mg/kg which was established for South Sweeper Creek sediments. This criteria was used for comparison because no sediment endpoint criteria have been established for NMCB.

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 concentration, depleted sulfates, and elevated methane concentrations in comparison to background conditions. Groundwater parameters presented in Table 9-1 collected during the 2012 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. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

9.4 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 for only 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 9-4. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well 02-461: The GRO concentration exhibits no trend at either the 80 or 95 percent confidence interval. The coefficient of variation indicates the concentration is stable.
- Well E-201: The GRO concentration exhibits no trend at either the 80 or 95 percent confidence interval. The coefficient of variation indicates the concentration is stable.

Table 9-2. Analytical Results for Petroleum-Related Chemicals at NMCB

Well Location	Year	DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)
02-451 Plume Edge	2006	52 U	25 U	1.0 U
	2007	49 U	100 U	0.50 U
	2008	96 U	100 U	0.50 U
	2009	49 U	100 U	0.50 U
	2010	52 U	100 U	0.50 U
	2011	130 Y	100 U	0.50 U
	2012	NP	NP	NP
02-452 Plume Edge	2006	9,600 J	6,400	1.0 U
	2007	9,000 Y	6,100 DY	0.50 U
	2008	6,600 Y	5,900 Y	5.0 UJ
	2009	9,900 Y	9,200 DY	0.50 U
	2010	9,300 Y	5,300 Y	0.50 U
	2011	11,000 Y	6,900 Y	0.50 UJ
	2012	11,000 Y	4,200 Y	0.10 J
02-453 Surface Water Protection Well	2006	9,400 J	4,100	1.2
	2007	8,400 Y	3,800 DY	1.7 U
	2008	7,500 Y	3,500 Y	2.4 J
	2009	6,000 Y	4,700 DY	4.2
	2010	7,600 YJ	3,200 Y	3.6 J
	2011	7,000 Y	3,900 Y	3.5 D
	2012	5,600 Y	2,600 Y	6.6 J
02-455 Surface Water Protection Well	2006	1,200	69	1.0
	2007	770 Y	61 J	0.68
	2008	440 Y	68 J	0.56
	2009	**FP**	**FP**	**FP**
	2010	650 YJ	49 J	0.95
	2011	510 Y	46 J	0.39 J
	2012	290 YJ	100 U	0.42 J
02-461 Plume Source Area	2006	3,900	9,900	4.9
	2007	5,500 Y	**14,000 DY**	6.0 DJ
	2008	4,300 Z	8,600 Y	5.1 D
	2009	4,800 Y	10,000 DY	2.5 D
	2010	3,700 Z	9,500 DY	1.9 J
	2011	8,700 Y	**14,000 DY**	3.0 DJ
	2012	4,900 Y	7,800 Y	1.4 J
02-478 Plume Edge	2006	5,600 J	480	1.2
	2007	3,100 Y	120 Z	0.33 J
	2008	2,800 Y	72 J	0.15 J
	2009	3,200 Y	81 J	0.34 J
	2010	3,500 YJ	77 J	0.26 J
	2011	4,700 Y	220 H	0.77
	2012	4,400 YJ	100 U	0.21 J
02-479 Surface Water Protection Well	2006	190	25 U	1.0 U
	2007	50 U	100 U	0.50 U
	2008	550 Y	100 U	0.50 U
	2009	1,200 Y	100 U	0.070 J
	2010	1,400 YJ	30 J	0.50 U
	2011	1,100 Y	100 U	0.50 U
	2012	NP	NP	NP
Endpoint Criteria[1]		15,000	13,000	50

Table 9-2. Analytical Results for Petroleum-Related Chemicals at NMCB (continued)

Well Location	Year	DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)
02-817	2006	12,000 J	12,000	11
Plume Edge	2007	**16,000 Y**	11,000 DY	7.8 D
	2008	8,900 Y	10,000 DY	13 D
	2009	6,700 Y	12,000 DY	11 D
	2010	6,500 Z	11,000 DY	11 J
	2011	6,500 Y	8,600 DY	17 DJ
	2012	4,500 Y	5,700 Y	5.5 J
02-818	2006	**FP**	**FP**	**FP**
Plume Edge	20072	13,000 Y	9,600 DY	11 D
	2008	9,800 Y	9,700 Z	5.5 JD
	2009	4,400 Y	9,100 DY	3.0 D
	2010	**FP**	**FP**	**FP**
	2011	15,000 Y	9,700 DY	2.6 DJ
	2012	**FP**	**FP**	**FP**
E-201	2006	1,700	**14,000**	1.0 U
Plume Edge	2007	1,900 Y	13,000 DY	0.50 U
	2008	1,700 Y	9,400 DY	1.0 U
	2009	2,300 Y	11,000 DY	0.50 U
	2010	1,700 Z	13,000 DY	0.50 U
	2011	1,900 L	**17,000 DY**	0.50 UJ
	2012	1,500 L	9,900 Y	0.50 U
NMCB-04	2006	**FP**	**FP**	**FP**
Downgradient	20072	3,400 Y	5,000 DY	0.86 U
	2008	**FP**	**FP**	**FP**
	2009	1,800 Y	3,200 Y	0.46 J
	2010	**FP**	**FP**	**FP**
	2011	1,600 Y	4,300 Y	0.50 U
	2012	1,400 Y	3,300 Y	0.23 J
NMCB-07	2006	**FP**	**FP**	**FP**
Plume Source	20072	7,800 Y	**17,000 DY**	**71 D**
Area	2008	**FP**	**FP**	**FP**
	2009	**FP**	**FP**	**FP**
	2010	**FP**	**FP**	**FP**
	2011	**FP**	**FP**	**FP**
	2012	**FP**	**FP**	**FP**
NMCB-08	2006	6,800	1,900	37
Surface Water	2007	**20,000 Y**	1,800 Y	29
Protection Well	2008	6,900 Y	2,600 Y	33 D
	2009	5,600 Y	2,800 DY	31
	2010	5,200 Y	2,600 Y	24 J
	2011	4,900 Y	3,300 Y	26 DJ
	2012	4,100 Y	2,200 Y	29 J
NMCB-09	2006	2,900	470	2.0
Surface Water	2007	3,500 Y	330 Y	2.9
Protection Well	2008	8,300 Y	580 H	3.8
	2009	2,600 Y	430 Y	3.7
	2010	2,400 Y	360 Y	2.3
	2011	2,400 Y	360 H	2.1
	2012	NP	NP	NP
Endpoint Criteria[1]		15,000	13,000	50

Table 9-2. Analytical Results for Petroleum-Related Chemicals at NMCB (continued)

Well Location	Year	DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)
NMCB-10 Plume Source Area	2006	4,200	4,700	**53**
	2007	13,000 Y	4,600 DY	37 J
	2008	6,800 Y	3,400 Y	6.8 D
	2009	**FP**	**FP**	**FP**
	2010	**FP**	**FP**	**FP**
	2011	4,000 Y	4,300 Y	24 DJ
	2012	**FP**	**FP**	**FP**
NMCB-11 Surface Water Protection Well	2006	1,600	25 U	1.0 U
	2007	2,500 Y	27 J	0.50 U
	2008	2,600 Y	17 J	0.50 U
	2009	1,200 Y	18 J	0.050 J
	2010	2,400 YJ	19 J	0.50 U
	2011	3,200 Y	19 J	0.14 J
	2012	2,600 YJ	100 U	0.11 J
NMCB-12 Surface Water Protection Well	2006	5,500 J	320	1.0 U
	2007	3,700 Y	77 J	0.50 U
	2008	6,500 Y	220 H	0.17 J
	2009	3,900 Y	150 H	0.12 J
	2010	5,600 YJ	130 H	0.13 J
	2011	4,000 Y	82 J	0.060 J
	2012	3,100 YJ	100 U	0.090 J
Endpoint Criteria[1]		15,000	13,000	50

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 greater than 0.02 feet 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 9-3. Analytical Results for Sediment at NMCB

Location	Year	DRO (mg/kg)	GRO (mg/kg)	Benzene (mg/kg)
NL-05	2009	40 YH	7.0 U	0.025 U
	2010	61 H	6.8 U	0.049 U
	2011	**120 DY**	6.4 U	0.064 U
	2012	59 Y	5.4 U	0.073 U
Endpoint Criteria[1]		90.6	12.2	none

Note:
[1] Endpoint criteria for East Canal have not been established so endpoints for South Sweeper Creek were used.

Table 9-4. Concentration Trend Evaluation for NMCB

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)	Mann-Kendall Trend			Sen's Slope			
							Trend at 80% C.I.	Trend at 95% C.I	Concentration Stability[2]	Median Slope	Statistically Significant Trend	2-Tailed Test at 80% C.I.	
												Lower Limit	Upper Limit
02-461	GRO	No	14,000 DY	13,000	7	-4	No trend	No trend	Stable	NC	NC	NC	NC
E-201	GRO	No	17,000 DY	13,000	7	-2	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.

9.5 CONCLUSIONS

This section presents the conclusions based on a review of analytical results obtained for groundwater monitoring conducted at the NMCB during 2012. The conclusions are as follows:

- Groundwater Flow: The interpreted groundwater flow direction in September 2012 is south toward Sweeper Cove and northwest toward East Canal north of Seawall Road.
- MNA: The groundwater parameters obtained during the 2012 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Measurable free product was detected in Seven wells 02-300 (0.69 feet), 02-497 (0.08 feet) 02-815 (0.05 feet), 02-818 (0.05 feet), NMCB-07 (0.37 feet), NMCB-10 (0.21 feet), and NMCB-11 (0.01 feet).
- Well 02-452: This well is located upgradient of the contaminant plume. DRO, GRO, and benzene concentrations remain below their respective endpoint criteria since sampling began in 2006 (seven consecutive sampling events).
- Well 02-453: This well is located within the contaminant plume. DRO, GRO, and benzene concentrations remain below their respective endpoint criteria since sampling began in 2006 (seven consecutive sampling events).
- Well 02-455: This well is located cross-gradient between two contaminant plumes. DRO, GRO, and benzene concentrations remain below their respective endpoint criteria since sampling began in 2006 (six sampling events).
- Well 02-461: This well is located upgradient of the contaminant plume. GRO was detected at a concentration above the endpoint criteria in 2011 but the concentration dropped below endpoint criteria in 2012. DRO and benzene concentrations have remained below their respective endpoint criteria since 2006 (seven consecutive sampling events).
- Well 02-478: This well is located between two contaminant plumes. DRO, GRO, and benzene concentrations remain below the endpoint criteria since sampling began in 2006 (seven consecutive sampling events).
- Well 02-817: This well is upgradient of the contaminant plume. DRO, GRO, and benzene concentrations remain below their respective endpoint criteria since 2008 (five consecutive sampling events).
- Well 02-818: This well is located within the contaminant plume. The well was not sampled due to the presence of free product measuring 0.05 feet in thickness.

- Well E-201: This well is located upgradient of the contaminant plume past Seawall Road. GRO was detected at a concentration above the endpoint criteria of 13,000 µg/L in 2011 but dropped below the endpoint criteria in 2012. DRO and benzene concentrations remain below their respective endpoint criteria since 2006 (seven consecutive sampling events).
- Well NMCB-04: This well is located upgradient of the contaminant plume near Main Road. DRO, GRO, and benzene were below their respective endpoint criteria since 2006 (two consecutive sampling events).
- Well NMCB-07: This well is located within the contaminant plume. The well was not sampled due to the presence of free product measuring 0.37 feet in thickness.
- Well NMCB-08: This well is located between two contaminant plumes. GRO and benzene concentrations remain below their respective endpoint criteria since sampling began in 2006 (seven consecutive sampling events). DRO has remained below the endpoint criteria since 2008 (five consecutive sampling events).
- Well NMCB-10: This well is located within the contaminant plume. The well was not sampled due to the presence of free product measuring 0.21 feet in thickness.
- Well NMCB-11: This well is located within the contaminant plume. DRO, GRO, and benzene concentrations remain below their respective endpoint criteria since sampling began in 2006 (seven consecutive sampling events). Free product was measured in this well at a thickness of 0.01 feet.
- Well NMCB-12: This well is located within the contaminant plume. DRO, GRO, and benzene concentrations remain below their respective endpoint criteria since sampling began in 2006 (seven consecutive sampling events).
- Sediment sample NL-05: DRO and GRO concentrations did not exceed endpoint criteria established for the South of Runway 18-36 site. The benzene concentration was not detected above method detection limits. 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.

9.6 RECOMMENDATIONS

No observances of endpoint criteria exceedances were observed in any sample collected from this site in 2012. Observances of free product in 2012 included three areas including wells 02-300, 02-497, 02-453, 02-818, NMCB-07, NMCB-10, NMCB-11, and NMCB-12 (Figure 9-1).

Because of the lack of exceedances of endpoint criteria for at least five consecutive sampling events at wells 02-452, 02-453, 02-455, 02-478, 02-817, NMCB-08, and NMCB-12 it is recommended that sampling at these wells be discontinued but that monitoring for free product continue during LTM activities due to these well's proximity to the areas of exceedance. It is further recommended that sampling be discontinued but that monitoring for free product continues at well NMCB-04 since product has historically been observed in this well prior to 2011.

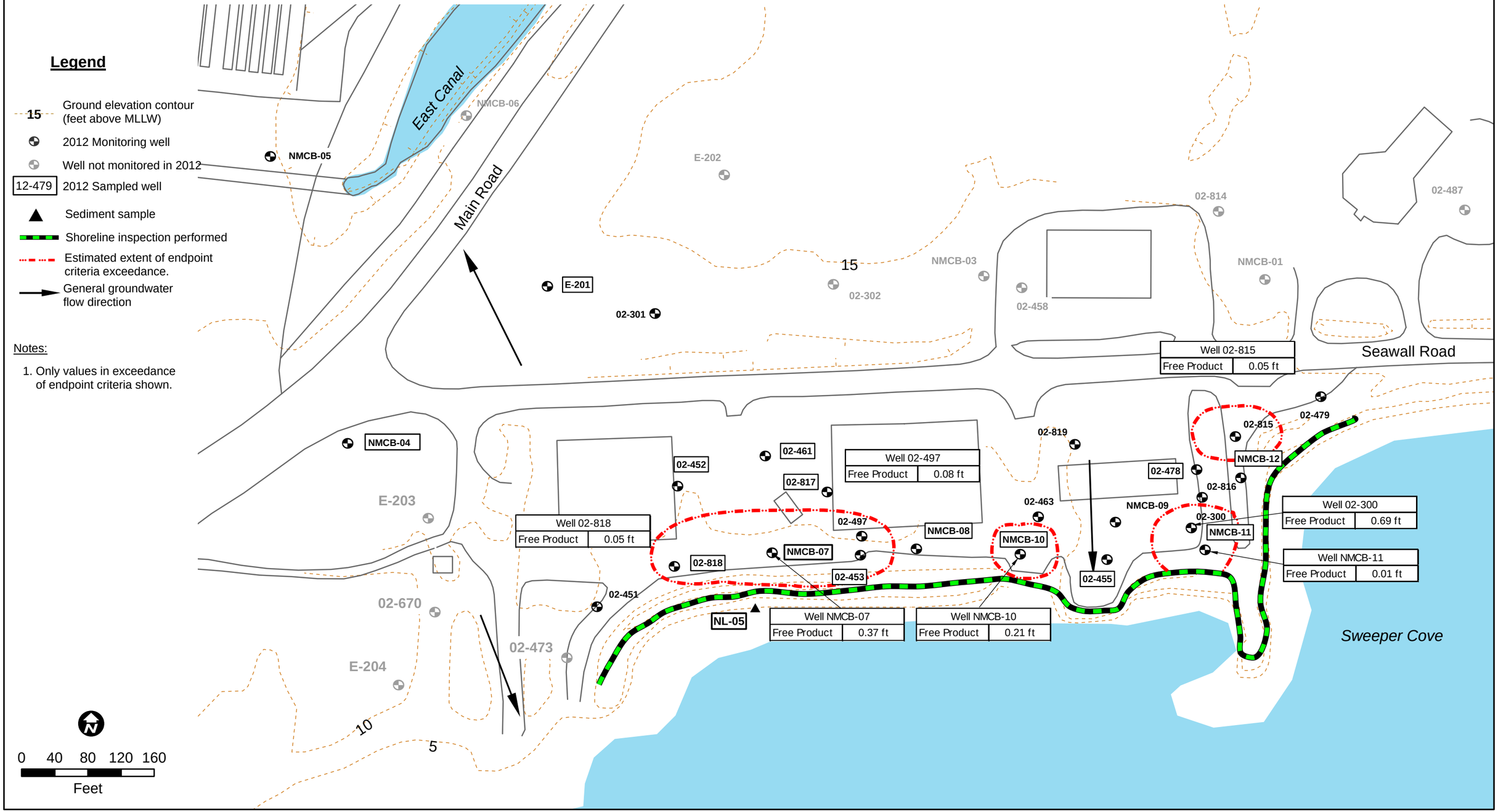
Because benzene has not exceeded endpoint criteria in any well at this site since sampling began in 2006, it is recommended that monitoring for this contaminant be discontinued at this site. Similarly, it is recommended that sampling for DRO at this site be discontinued since this contaminant has not been observed in any well since 2007.

It is also recommended that monitoring at well NMCB-05 be discontinued since groundwater concentrations have not exceeded endpoint criteria and free product has not been observed in this well since 2010.

While endpoint criteria were not exceeded in wells E-201 and 02-461 in 2012, GRO concentrations did exceed endpoint criteria in 2011. Therefore, it is recommended that sampling at these wells be reduced to every odd year with the next sampling occurring in 2013. This recommendation is consistent with CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling. All other on-site monitoring is recommended to continue due to the following:

- The continued observance of free product in six site wells during monthly recovery activities from October 2011 through September 2012 (Appendix J);
- Stable concentrations of GRO in groundwater.
- The tidal influence on groundwater flow beneath the site.

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 reduced to every odd year with the next monitoring to occur in 2013.



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U.S. NAVY	SEALASKA	**Figure 9-1** **NMCB Building T-1416 Expanded Area** **Sample Locations**	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

10. 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 2012. Limited groundwater monitoring was the remedy selected for this site (Navy et al. 2000); however, monitoring results obtained between 1999 and 2003 identified benzene concentrations in groundwater above the determined endpoint criteria. Therefore, the Navy initiated MNA in preparation for a remedy review scheduled to take place during 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.

10.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at three wells on September 7, 2012. Table 10-1 provides the measured depths to water, the calculated groundwater elevations, and if present the product thicknesses. Figure 10-1 shows the locations of the wells at ROICC Contractor's Area, UST ROICC-7, the site topography, and the interpreted groundwater flow direction. The interpreted groundwater flow direction is toward the southeast, which is in agreement with the regional setting and historical information. However, the interpreted groundwater flow direction is based on a linear orientation of wells. Free product was not observed in any of the wells in 2012.

Groundwater sampling was performed at the three scheduled monitoring wells on September 7, 2012. 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.

Table 10-1. 2012 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)
08-175	13.59	3.38	10.21	0	6.42	0.904	5	0.00	8.15	0.0	-89
08-200	14.87	4.08	10.79	0	6.52	1.76	0	0.00	8.37	0.1	-115
08-202	13.86	2.74	11.12	0	6.58	1.14	4	0.00	7.77	0.1	-120

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.

10.2 TARGET ANALYTE RESULTS

Groundwater samples collected from wells 08-175, 08-200, and 08-202 and were analyzed for benzene. 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. Laboratory forms presenting the 2012 results are provided in Appendix F. Figure 10-1 shows the locations of the site wells and the analytical results that exceed the applicable endpoint criteria.

Table 10-2. Analytical Results for Petroleum-Related Chemicals for ROICC Contractor's Area, UST ROICC-7

Well Location	Year	Benzene (µg/L)
08-175	2003	1.1 J
Downgradient	2004	0.18 J
	2005	NP
	2006	1.0 U
	2007	NP
	2008	0.21 J
	2009	NP
	2010	0.15 J
	2012	0.11 J
08-200	2003	**390**
Plume Source	2004	**288J**
	2005	**233 J**
	2006	**250**
	2007	**300 D**
	2008	**320 D**
	2009	**310 D**
	2010	**310 JD**
	2012	**280 D**
08-202	2003	**24**
Onsite	2004	**16**
	2005	**14.6**
	2006	**13 J**
	2007	**14**
	2008	**16**
	2009	**12**
	2010	**12**
	2012	**9.6**
Endpoint Criteria		5

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

Benzene was detected above the endpoint criteria (5 µg/L) in the 2012 samples collected from wells 08-200 and 08-202 at concentrations of 280 µg/L and 9.6 µg/L, respectively. DRO was detected below the endpoint criteria in the sample collected from well 08-175 at a concentration of 0.11 µg/L.

10.3 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 10-1 collected during the 2012 LTM event support 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.

10.4 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 for only 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 10-3. 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 -0.886.

Table 10-3. 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	310 JD	5	10	7	No trend	No trend	Stable	NC	NC	NC	NC
08-202	Benzene	Yes	12	5	10	-33	Decreasing	Decreasing	NA	-0.886	Yes	-1.13	-0.68

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.

10.5 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 2012. The conclusions are as follows:

- Groundwater Flow: The groundwater flow direction in 2012 at the site is interpreted to be to the southeast.
- MNA: The groundwater parameters obtained during the 2012 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 2012.
- Well 08-175: This well is located downgradient of the contaminant plume. Benzene was not detected above endpoint criteria in 2012 and has remained below endpoint criteria since sampling began in 2003 (six sampling events).
- Well 08-200: This well is located within the contaminant plume. Benzene was detected above the endpoint criteria in 2012. The trend evaluation performed on the benzene data collected between 2003 and 2012 shows stable benzene concentrations with no trend at both the 80 and 95 percent confidence intervals.
- Well 08-202: This well is located within the contaminant plume. Benzene was detected above the endpoint criteria in 2012. The statistical evaluation performed on the benzene data collected between 2003 and 2012 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.

10.6 RECOMMENDATIONS

Because the benzene concentration in well 08-175 has remained below endpoint criteria since 2003 and because benzene concentrations are exhibiting decreasing trends, it is recommended that monitoring at this location be discontinued.

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 to be monitored biennially on every odd year. This recommendation is consistent with CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling.

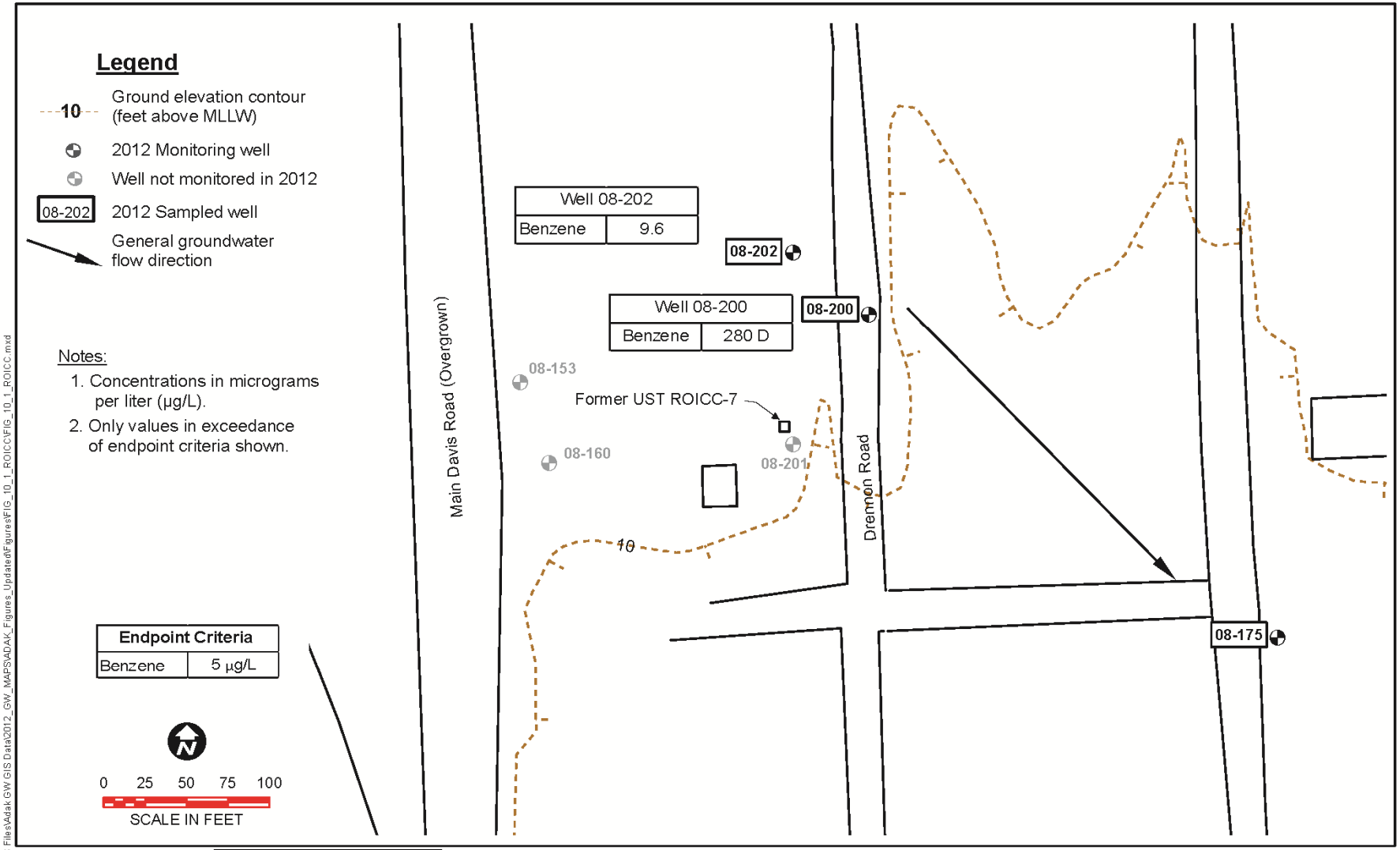

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Figure 10-1
ROICC Contractor's Area
UST ROICC-7
Sample Locations

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11. 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 2012. MNA is the remedy selected for this site (Navy et al. 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.

11.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at two wells on September 5, 2012. Table 11-1 provides the measured depths to water, the calculated groundwater elevations, and if present the product thicknesses. Figure 11-1 shows the locations of the wells 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 two wells; 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 two scheduled monitoring wells on September 5, 2012. Field measurements were recorded on the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 11-1 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. No free product was observed in either well during the 2012 field monitoring activities.

Table 11-1. 2012 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	2.56	12.50	0	6.39	0.488	18	0.00	8.97	0.0	-70
14-110	15.10	2.78	12.32	0	6.30	0.474	1	0.00	10.16	0.0	-69

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.

11.2 TARGET ANALYTE RESULTS

Groundwater samples collected from wells 14-100 and 14-110 were analyzed for GRO. Table 11-2 presents the historical analytical results for all site monitoring wells. The historical analytical results obtained for these locations are also summarized in Appendix C. Laboratory forms presenting the 2012 results are provided in Appendix F. Figure 11-1 shows the locations of the site wells and the analytical results that exceed the applicable endpoint criteria.

GRO was detected above the endpoint criteria (1,300 µg/L) in well 14-100 at a concentration of 1,800 µg/L and below the endpoint criteria in well 14-110 at a concentration of 780 µg/L.

Table 11-2. 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**
14-110	2003	920
Downgradient	2004	1,240
	2005	631
	2007	990 Y
	2008	960 Z
	2009	NP
	2010	730 Y
	2012	780 Y
Endpoint Criteria		1,300

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

11.3 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 11-1 collected during

the 2012 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.

11.4 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 is presented in Table 11-3. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well 14-100: The GRO is stable with no trend at both the 80 and 95 percent confidence intervals.

11.5 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 2012. The conclusions are as follows:

- Groundwater Flow: The groundwater flow direction in 2012 at the site is interpreted to be to the east.
- MNA: The groundwater parameters obtained during the 2012 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 2012.
- Well 14-100: This well is located within the contaminant plume. GRO was detected at a concentration above the endpoint criteria in 2012. The concentration trend is stable at the 80 and 95 percent confidence intervals.
- Well 14-110: This well is located downgradient to the contaminant plume. GRO was detected below endpoint criteria for the seventh time since monitoring began in 2003.

Table 11-3. Concentration Trend Evaluation for Runway 5-23 Avgas Valve Pit

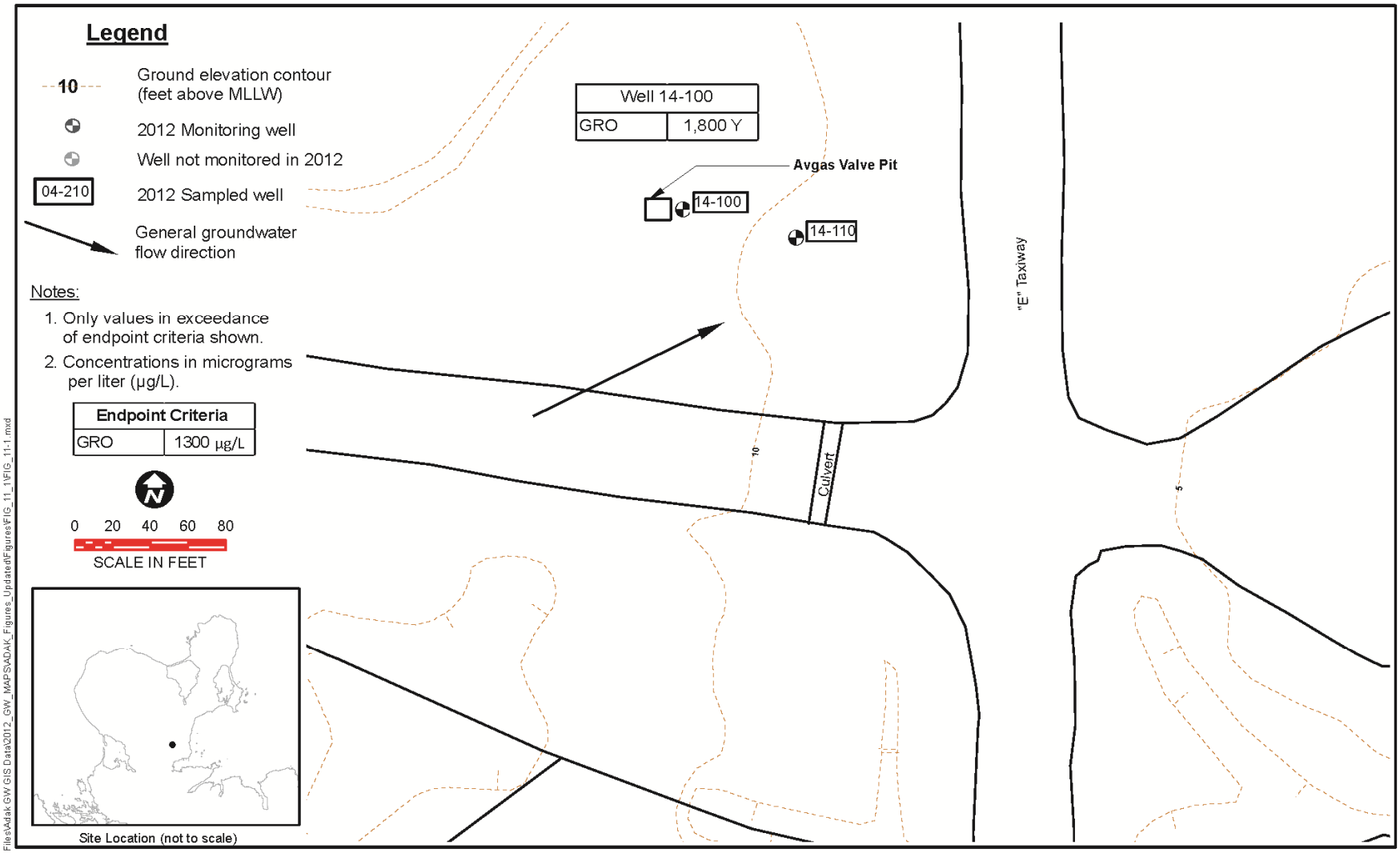
							Mann-Kendall Trend			Sen's Slope			
												2-Tailed Test at 80% C.I.	
Well	Target Analyte	Exceeds Endpoint Criteria	Highest Concentration Last Two Sampling Periods (µg/L)	Endpoint Criteria[1] (µg/L)	Sampling Periods (n)	Mann-Kendall Statistic (S)	Trend at 80% C.I.	Trend at 95% C.I	Concentration Stability[2]	Median Slope	Statistically Significant Trend	Lower Limit	Upper Limit
14-100	GRO	Yes	2,200 Y	1,300	10	3	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.

11.6 RECOMMENDATIONS

Since GRO has remained below endpoint criteria in well 14-110 since sampling commenced in 2003 and because concentrations of GRO are exhibiting stable concentrations, it is recommended that monitoring at this well be discontinued.

GRO remains above the endpoint criteria in well 14-100. Since no downgradient receptors exist at the site and GRO exhibits stable concentrations, it is recommended that monitoring at this site be continue to be conducted to every other year. It is recommended that monitoring be changed to every odd year with the next sampling occurring in 2013. This recommendation is consistent with CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling.



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U.S. NAVY	SEALASKA	Figure 11-1 Runway 5-23 Avgas Valve Pit Sample Locations	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

12. SA 78, OLD TRANSPORTATION BUILDING, USTS 10583 AND 10584, AND ASTS

This section presents the results of groundwater monitoring performed at the SA 78, Old Transportation Building, USTs 10583 and 10584, and ASTs site during 2012. The initial remedy specified for this site in the OU A ROD was free product recovery (Navy et al. 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). Surface water protection monitoring is also conducted at this site to monitor for migration of petroleum hydrocarbons toward surface water targets.

To comply with requirements specified for this remedy, the Navy conducts periodic groundwater sampling and water level/product thickness monitoring. The Final Decision Document for Petroleum Sites with No Unacceptable Risk (Navy and ADEC 2005) 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 Alaska groundwater cleanup levels (18 AAC 75.345), and to verify that concentrations of target analytes are not migrating to surface water protection points.

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 five wells on August 31, 2012. 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 SA 78, Old Transportation Building, USTs 10583 and 10584, and ASTs, the site topography, and the interpreted groundwater flow direction which is southeast toward Clam Lagoon. Free product was not observed in any of the wells in 2012.

Table 12-1. 2012 Field Measurements for SA 78, Old Transportation Building, USTs 10583 and 10584, and ASTs

	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)
12-145	61.88	24.49	37.39	0	6.28	0.342	50.6	0.00	7.78	0.0	-48
12-801	35.00	3.22	31.78	0	NP	NP	NP	NP	NP	NP	NP
12-802	10.92	2.84	8.08	0	6.27	0.406	0.0	0.00	8.56	0.0	194
MW-116	44.96	14.19	30.77	0	5.16	0.275	13.6	2.67	5.85	0.0	296
MW-117	49.81	14.25	35.56	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.

Groundwater sampling was performed at the three scheduled monitoring wells on August 31, 2012. 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 groundwater parameters stabilized at well 12-802. Parameters did not stabilize at wells MW-116 and 12-801, therefore three times the casing volume of groundwater was removed prior to sampling per CMP Revision 5 (Navy 2012e). The 2012 analytical results in these wells are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

Because free product was observed in surface water protection well 12-802 in 2009, a visual inspection of Clam Lagoon shoreline between wells 12-801 and 12-802 was conducted in 2012. The purpose of the inspection was to identify groundwater or petroleum seeps on the shoreline, or sheens on the surface water of Clam Lagoon. No seeps, sheens, odors, or discolorations were observed during the shoreline inspection. Surface water protection surface water/sediment sampling was to be performed at this location if contamination was observed during the inspection. Since no contamination was observed, this sampling was not performed. Shoreline inspection and results are summarized in Section 4.

12.2 TARGET ANALYTE RESULTS

The groundwater samples collected from wells 12-145 and 12-802 were analyzed for DRO, GRO, and benzene. Well MW-116 was analyzed for DRO only. Table 12-2 presents the historical analytical results for all site monitoring wells. The historical analytical results obtained for these locations are also summarized in Appendix C. Laboratory forms presenting the 2012 results are provided in Appendix F. Figure 12-1 shows the locations of the site wells.

DRO, GRO, and benzene were detected below their respective endpoint criteria of 15,000 µg/L, 13,000 µg/L, and 50 µg/L in samples collected from wells 12-145 and 12-802, and DRO was also detected below its endpoint criteria in the sample collected from well MW-116 at the SA 78, Old Transportation Building site during 2012.

12.3 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 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 12-1 collected during the 2012 LTM event support 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.

Table 12-2. Analytical Results for Petroleum-Related Chemicals for SA 78, Old Transportation Building, USTs 10583 and 10584, and ASTs

Well Location	Year	DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)
12-145	2002	850	4,500	**160**
Source Plume	2005	4,580 J	1,880	2.4 J
	2006	**FP**	**FP**	**FP**
	2007	**38,000 Y**	3,600 DY	0.76
	2008	**FP**	**FP**	**FP**
	2009	4,600 Y	3,700 Y	1.2
	2010	2,000 Z	4,100 Y	6.4
	2012	2,200 YJ	1,200 Y	1.4
12-802	2004	250 U	18.9 UJ	0.5 U
Downgradient	2005	240 U	80 U	0.5 U
	2006	57 U	25 U	1.0 U
	2008	27 J	100 U	0.50 U
	2009	NP	NP	NP
	2010	26 J	100 U	0.50 U
	2012	12 J	100 U	0.50 U
MW-116	2002	77 J	12 J	1.0 U
Downgradient	2005	238 U	24.8 J	0.50 U
	2006	84 U	25 U	1.0 U
	2007	97 Z	100 U	0.50 U
	2009	100 Y	100 U	0.50 U
	2010	28 J	NP	NP
	2012	24 J	NP	NP
Endpoint Criteria[1]		15,000	13,000	50

Notes:
[1] The endpoint criteria are 10 times ADEC cleanup levels because groundwater is not expected to be used for drinking water.
Bold indicates reported concentration is greater endpoint criteria.

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 for only analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. Therefore, no statistical trends were performed for this site in 2012.

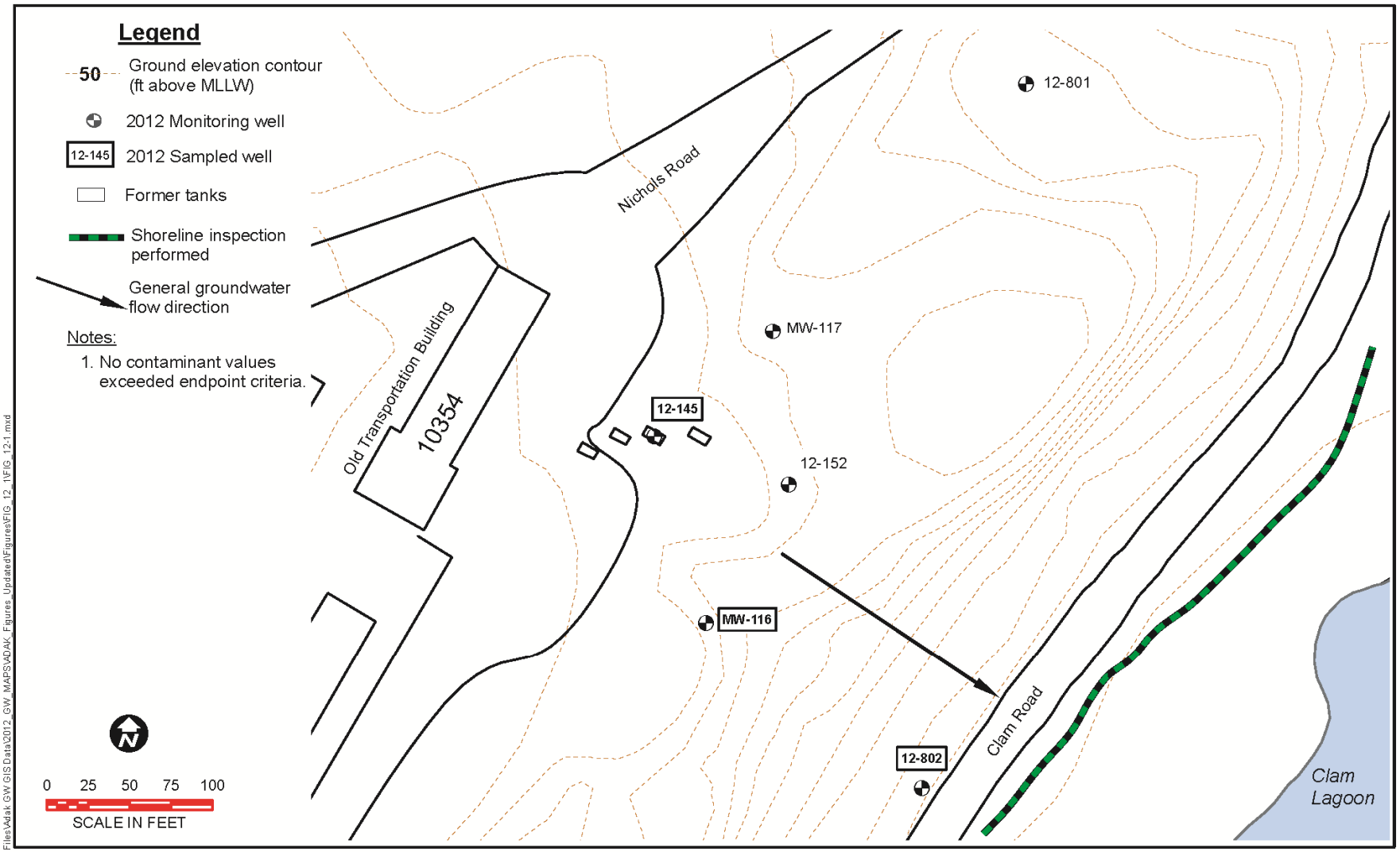
12.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring results performed at SA 78, Old Transportation Building, USTs 10583 and 10584, and ASTs in 2012. The conclusions are as follows:

- Groundwater Flow: The groundwater flow direction in 2012 at the site is interpreted to be southeast toward Clam Lagoon.
- MNA: The groundwater parameters obtained during the 2012 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 2012.
- Well 12-145: DRO, GRO, and benzene were below their respective endpoint criteria in 2010 and have been below endpoint criteria for three consecutive sampling events.
- Well MW-116: DRO has been below its respective endpoint criteria since sampling began in 2002 for seven consecutive sampling events.
- Well 12-802: Surface water protection monitoring is conducted at this well. DRO, GRO, and benzene have been below their respective endpoint criteria since sampling began in 2004 for six consecutive sampling events.
- A shoreline inspection that was performed downgradient of the site did not reveal any evidence of petroleum contamination.

12.6 RECOMMENDATIONS

Onsite groundwater DRO, GRO, and benzene concentrations have been below their respective endpoint criteria since for at least three consecutive sampling events. Strong evidence of natural attenuation was shown to be occurring in onsite groundwater in 2009 and data supporting the continuation of natural attenuation was again observed in 2010. No free product has been observed in any site well since 2009 and no evidence of petroleum contamination has been observed during any shoreline inspection. Based on these observations, it is recommended that monitoring at this site be discontinued and that the site be recommended for closure.



U.S. NAVY	SEALASKA	Figure 12-1 SA 78, Old Transportation Building USTs 10583, 10584, and ASTs Sample Locations	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

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13. 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 2012. Limited groundwater monitoring is the OU A ROD-specified remedy for the south end of the site (Navy et al. 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.

13.1 FIELD MEASUREMENTS

The monitoring wells completed at this site were gauged and sampled. Depth-to-water and product thickness measurements were collected at three monitoring wells on August 27, 2012 (Table 13-1). Well 02-230 was monitored for surface water protection purposes. Figure 13-1 shows the location of monitoring wells, land surface topography, and Sweeper Cove. Table 13-1 provides the measured depths to water and the calculated groundwater elevations. Based on the analysis of historical water level measurements and the hydrogeologic setting of the site, the groundwater flow direction is to the east-southeast toward Sweeper Cove. Measurable free product was not observed in any of the wells in 2012.

Field measurements were recorded on field forms during monitoring well sampling activities (Appendix A). Table 13-1 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 13-1. 2012 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	12.48	1.21	0	6.20	0.648	12	0.00	7.13	0.0	-79
601	13.77	11.68	2.09	0	6.11	0.350	3	0.00	7.65	0.0	-50
MRP-MW8	12.72	11.21	1.51	0	6.09	0.439	5	0.00	7.18	0.0	-71

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 shoreline from well MRP-MW8 to the mouth of South Sweeper Creek was conducted in 2012. 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, or discolorations were observed during the shoreline inspection. Shoreline inspection and results are summarized in Section 4.1.3.

13.2 TARGET ANALYTE RESULTS

The groundwater samples collected from all wells were analyzed for DRO. Figure 13-1 shows the locations of the wells sampled and the analytical results that exceed the applicable endpoint criteria. Table 13-2 presents the analytical results. The historical analytical results obtained for these locations are summarized in Appendix C. Laboratory forms presenting the 2012 results are provided in Appendix F.

DRO was detected above the endpoint criteria (1,500 µg/L) in samples collected from wells MRP-MW8 (3,900 µg/L), 601 (1,800 µg/L), and 02-230 (3,200 µg/L).

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 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 2012 LTM event, which are presented in Table 13-1, 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.

13.4 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 for only 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 13-3. Worksheets and graphs are provided in Appendix H.

Table 13-2. Analytical Results for Petroleum-Related Chemicals for SA 79, Main Road Pipeline, South End

Well Location	Year	DRO (µg/L)
MRP-MW8	2001	**2,790**
Plume Source Area	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**
601	2011	**2,100 Y**
Plume Source Area	2012	**1,800 Y**
02-230	2001	**4,230**
Surface Water	2002	**3,500**
Protection Well	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**
Endpoint Criteria		1,500

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

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 the 80 percent confidence level. However the Sen's evaluation does not indicate that this trend is statistically significant.

13.5 CONCLUSIONS

This section presents the conclusions based on groundwater monitoring conducted at the SA 79, Main Road Pipeline, South End site in 2012. The conclusions are as follows:

- Groundwater Flow Direction: The hydrogeologic setting of the site and the limited water level elevation data indicate that the groundwater flow direction is to the east toward Sweeper Cove.
- MNA: The groundwater parameters obtained during the 2012 LTM event provides 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 2012 exhibits no trend at the 80 and 95 percent confidence intervals.
- Well 02-230: 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 collected between 2001 and 2012 exhibits decreasing concentrations at the 80 percent confidence interval but no trend at the 95 percent confidence interval. Sen's slope indicates that the decreasing trend is not statistically significant.
- Well 601: This well is located within the contaminant plume. DRO has remained above the endpoint criteria since 2011 when sampling was initiated (two consecutive sampling events).
- A shoreline inspection in Sweeper Cove downgradient of the site revealed no evidence of petroleum contamination.

13.6 RECOMMENDATIONS

Because of the observed exceedances of DRO above endpoint criteria in wells MRP-MW8, 02-230, and 601, the continued monitoring of DRO is recommended. However, since DRO concentrations are exhibiting decreasing trends and stable concentrations, it is recommended that monitoring at this site be reduced to every odd year with the next sampling occurring in 2013. This recommendation is consistent with CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling.

Table 13-3. 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	-4	No trend	No trend	Stable	NC	NC	NC	NC
02-230	DRO	Yes	4,200 Y	1,500	10	-13	Decreasing	No trend	NA	-60.1	No	-229	77.8

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.

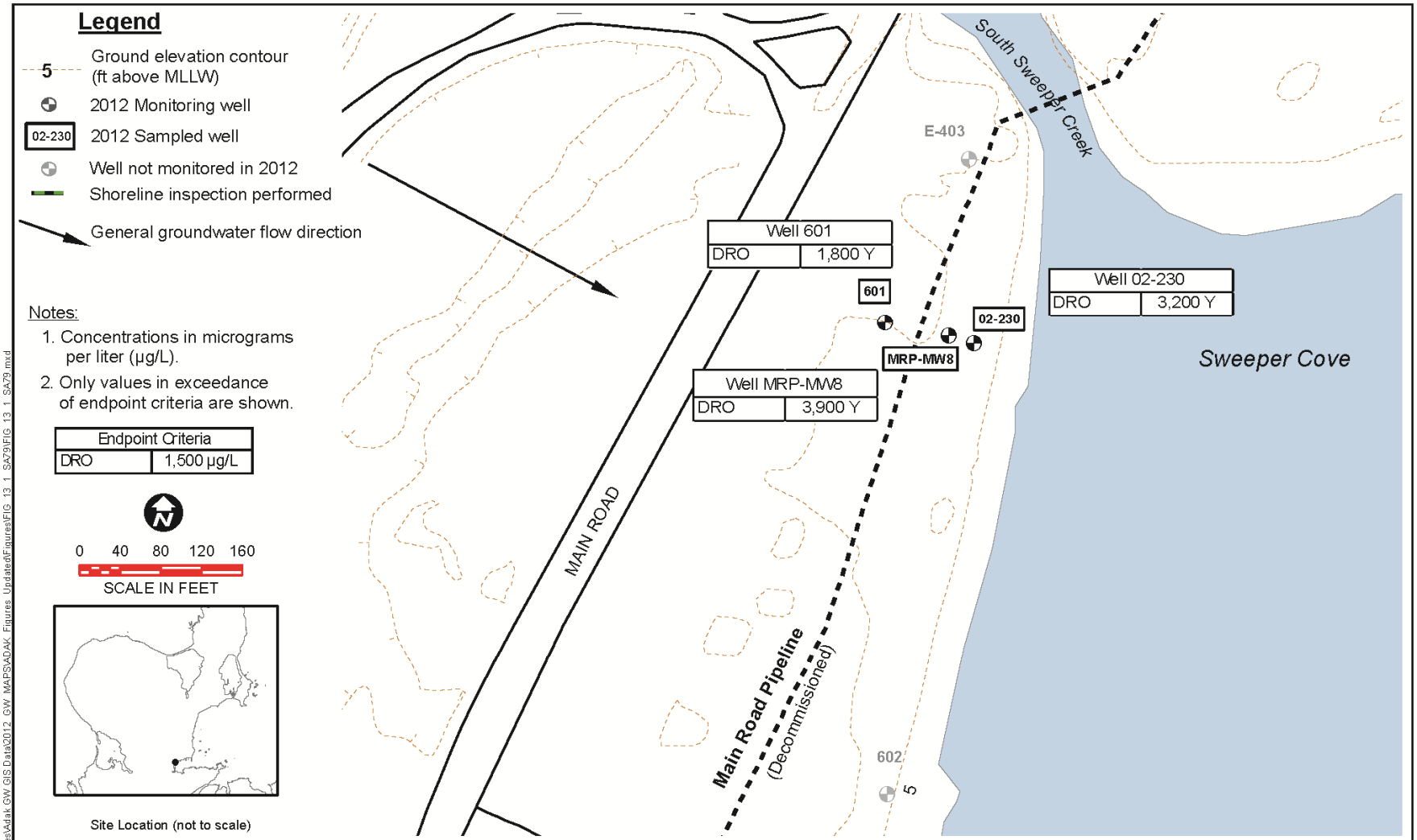

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Figure 13-1
SA 79, Main Road Pipeline, South End
Sample Locations

Task Order 55
Adak Island, AK
2012 Annual Groundwater Monitoring Report

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14. 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 2012. The remedy specified for this site in the OU A ROD is free product recovery (Navy et al. 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.

14.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at nine monitoring wells on September 1, 2012. Table 14-1 presents the depth-to-water measurements (corrected for product thickness, if present), 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). Figure 14-1 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). Three wells monitored in 2012 (04-155, 04-173, and SP4-2) have shallow water levels that represent this perched zone. The 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.

Sampling was conducted at five monitoring wells on September 3 and 4, 2012. Field measurements were recorded on the field forms and in the logbooks during monitoring well sampling activities (Appendix A). Table 14-1 lists the final field measurements recorded at each monitoring well prior to sample collection.

Table 14-1. 2012 Field Measurements for SA 80, Steam Plant 4, USTs 27089 and 27090

	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	15.98	11.79	0	NP	NP	NP	NP	NP	NP	NP
04-157	28.18	19.22	8. 96	Trace	NP	NP	NP	NP	NP	NP	NP
04-158	27.36	19.08	8.28	0	6.03	0.462	70.6	0.00	7.74	0	-31
04-159	29.86	23.21	6.65	0	6.51	0.480	16.0	1.70	6.73	0	-107
04-164	28.51	21.83	6.68	0	NP	NP	NP	NP	NP	NP	NP
04-173	27.46	14.60	12.86	Trace	6.19	0.409	9	0.00	6.05	0.0	-45
04-801	27.76	21.32	6.44	0	5.63	0.239	22	6.07	6.14	0.0	219
SP4-2	27.23	14.34	12.89	0	NP	NP	NP	NP	NP	NP	NP
SP4-3	26.70	20.03	6.67	0	6.30	0.481	124	0.00	6.24	0.0	-63

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.

A review of the sampling data reported for this site indicates that, prior to sample collection, groundwater parameters stabilized in wells 04-158, 04-173, and SP4-3 but not in wells 04-159 and 04-801. Therefore, three casing volumes of groundwater were removed from these wells prior to sampling per CMP Revision 5 (Navy 2012e). The 2012 analytical results in these wells are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

No measurable free product was observed in any of the nine wells. Trace product was seen in wells 04-157 and 04-173 (Table 14-1) during the 2012 LTM field event. Monthly free product recovery activities were performed at this site during October 2011 through September 2012. A total of 2.09 gallons was recovered from site wells during this time period. The monthly free product recovery activities are summarized in Appendix J.

14.2 TARGET ANALYTE RESULTS

Groundwater samples were collected from wells 04-158, 04-159, 04-173, and 04-801 in 2012 and analyzed for DRO. Figure 14-1 shows the location of the wells and the analytical results that exceeded the endpoint criteria. Table 14-2 presents the results of these analyses. The historical analytical results obtained for these locations are summarized in Appendix C. Laboratory reports presenting the 2012 results are provided in Appendix F.

DRO was detected above the endpoint criteria (1,500 µg/L) in samples collected from wells 04-158 (8,700 µg/L), 04-159 (3,200 µg/L), 04-173 (3,900 µg/L), and SP4-3 (3,500 µg/L). DRO in the sample from well 04-801 was detected below endpoint criteria at 16 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 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 14-1 collected during the 2012 LTM event supports evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and depleted dissolved oxygen (ranging from 0.0 mg/L to 1.70 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 80, Steam Plant 4, USTs 27089 and 27090

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**
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**
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**
04-801	2003	NP
Downgradient	2004	NP
	2005	250 U
	2006	53 U
	2007	520 Y
	2008	21 J
	2009	58 U
	2010	15 J
	2011	30 J
	2012	16 J
Endpoint Criteria		1,500

Table 14-2. Analytical Results for Petroleum-Related Chemicals for SA 80, Steam Plant 4, USTs 27089 and 27090 (continued)

Well Location	Year	DRO (µg/L)
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**
Endpoint Criteria		1,500

Notes:
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 2012e). Trend evaluation was conducted for only 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 14-3. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well 04-159: The DRO concentration is stable with no trend at the 80 or 95 percent confidence intervals.
- Well SP4-3: The DRO concentration is stable with no trend at the 80 or 95 percent confidence intervals.

14.5 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 2012. The conclusions are as follows:

- Groundwater Flow: Based on the field measurements in September 2012, the interpreted groundwater flow direction in the regional aquifer is west-southwest toward the East Canal.

Table 14-3. Concentration Trend Evaluation for SA 80, Steam Plant 4, USTs 27089 and 27090

							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
04-159	DRO	Yes	5,000 Y	1,500	8	4	No trend	No trend	Stable	NC	NC	NC	NC
SP4-3	DRO	Yes	5,700 Y	1,500	8	-2	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.

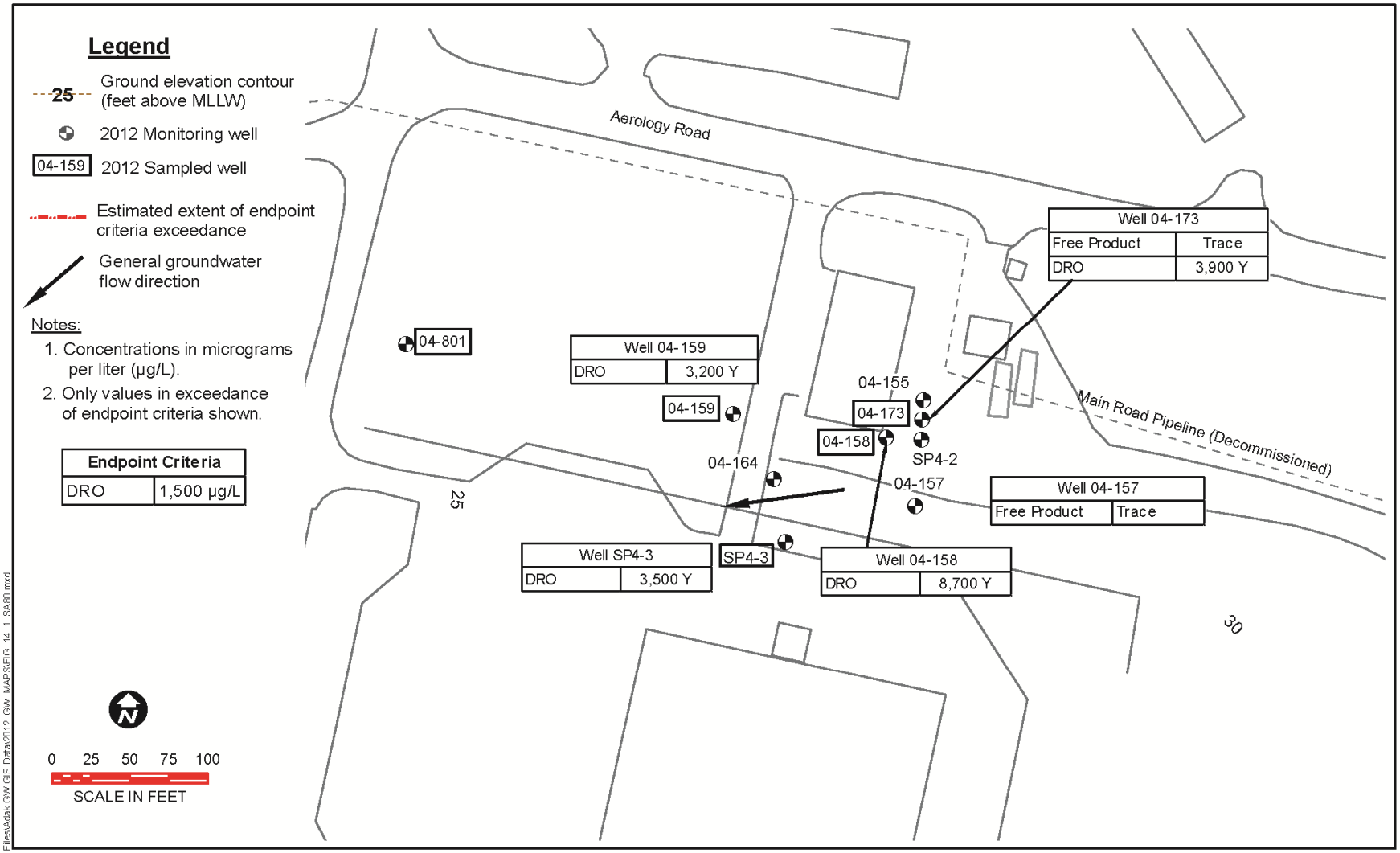
- MNA: The groundwater parameters obtained during the 2012 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Wells 04-157 and 04-173: Free product was detected in these wells in trace amounts.
- Well 04-158: This well is located within the contaminant plume. Free product was not detected in this well in 2012 but DRO exceeded endpoint criteria.
- Well 04-159: This well is located within the contaminant plume. DRO continued to be detected above the endpoint criteria (since 2006). As indicated by statistical analysis of data collected between 2005 and 2012, DRO concentrations have stabilized in this well. In 2011, the concentration exhibited an increasing trend.
- Well 04-173: This well is located within the contaminant plume. Free product was not detected in this well in 2012 but DRO exceeded endpoint criteria.
- Well 04-801: This well is located downgradient of the contaminant plume. DRO was detected at an estimated concentration below the laboratory reporting limit in this downgradient well in 2012 and has remained below the endpoint criteria since sampling began in 2005 (eight consecutive sampling events).
- Well SP4-3: This well is located within the contaminant plume. DRO was detected at concentrations above endpoint criteria in 2012 for the second consecutive sampling event. As indicated by statistical analysis of data collected between 2003 and 2012, DRO concentrations have stabilized in this well.

14.6 RECOMMENDATIONS

Because DRO has exhibited stable concentrations in groundwater at this site and because DRO has not exceeded endpoint criteria for eight consecutive sampling events, it is recommended that monitoring at well 04-801 be discontinued.

Because measurable product has not been observed in well SP4-2 since 2006, it is recommended that monitoring at this location be discontinued.

Additionally, it is recommended that monitoring at this site be reduced to every odd year with the next sampling to occur in 2013 since DRO is exhibiting stable concentrations. This recommendation is consistent with CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling.



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15. 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 2012. The remedy specified for this site in the OU A ROD is Free Product Recovery (Navy et al. 2000). ICs, product recovery, and MNA were established as remedies in the Final Decision Document South of Runway 18-36 Area, August 2006 (Navy 2006a). 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 2012 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 2006a) 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.

15.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at 16 monitoring wells on August 27, 2012. Table 15-1 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). Measurable free product was detected in two wells during the 2012 LTM field event: E-216 at a product thickness of 0.43 feet; and well RW-18/36-04 at a product thickness of 0.06 feet.

Table 15-1. 2012 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	14.59	2.00	0	6.07	0.950	12.4	0.00	6.67	0.0	-149
02-232	18.54	17.40	1.14	0	6.24	0.815	61.5	0.00	6.95	0.0	-102
02-518	7.97	6.46	1.51	0	NP	NP	NP	NP	NP	NP	NP
18/36-02	19.86	17.79	2.07	0	NP	NP	NP	NP	NP	NP	NP
AS-1	12.10	13.71	-1.61	0	6.26	0.666	33.7	0.00	7.04	0.0	-102
E-207	11.98	10.04	1.94	0	NP	NP	NP	NP	NP	NP	NP
E-209	8.16	6.63	1.53	0	NP	NP	NP	NP	NP	NP	NP
E-213	13.73	11.28	2.45	0	NP	NP	NP	NP	NP	NP	NP
E-216	18.68	16.52[1]	2.16[1]	0.43	NP	NP	NP	NP	NP	NP	NP
E-217	18.12	15.62	2.50	0	NP	NP	NP	NP	NP	NP	NP
RW-18/36-02	5.82	4.21	1.61	0	NP	NP	NP	NP	NP	NP	NP
RW-18/36-04	16.26	13.78[1]	2.51[1]	0.06	NP	NP	NP	NP	NP	NP	NP
RW-18/36-05	11.39	9.36	2.03	0	NP	NP	NP	NP	NP	NP	NP
Z 3-2	NA	10.29	NA	0	NP	NP	NP	NP	NP	NP	NP
Z 3-6	NA	7.68	NA	0	NP	NP	NP	NP	NP	NP	NP
Z 4-2	NA	12.62	NA	0	NP	NP	NP	NP	NP	NP	NP
Surface Water Samples											
NSWSD-7	NA	NA	NA	NA	5.97	12.7	7	8.41	13.2	0.5	126
NSWSD-8	NA	NA	NA	NA	7.04	4.24	8	8.44	13.4	0.2	121

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.

Figure 15-1 shows the location of the monitoring wells, the site topography, and the interpreted groundwater flow direction, and the downgradient surface water bodies (South Sweeper Creek and Sweeper Cove). The water level 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. The potentiometric surface recorded for this sampling event is similar to previous studies.

Three monitoring wells, two surface water locations, and three sediment sampling locations were sampled between August 27 and September 8, 2012. 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 15-1 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, except for well 02-231, exhibited groundwater parameters that stabilized to within specified criteria. Therefore, three casing volumes of groundwater were removed from well 02-231 prior to sampling per CMP Revision 5 (Navy 2012e). The 2012 analytical results in this well are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

Monthly free product recovery activities were performed at this site during contract year 2011/2012 (October through September). Because product recovery endpoints were met, product recovery activities were discontinued in February 2012 as recommended in the Remedial Action Summary Report, Free Product Recovery, Adak (Navy 2012f).

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. One small area of black-stained sediment (4 ft by 2 ft) was observed just south of the Moffett Road Bridge. Several sections of the shoreline downgradient of the site contained black-stained sediment just beneath the soil surface which released sheen when disturbed. Oily sediments, petroleum sheen, and odor were observed along the shoreline adjacent to South of Runway 18-36 Area during sediment sampling at locations NSWSD-2 and NSWSD-05 at approximately a quarter to a half inch below the sediment surface. For the first 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 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. Results of the visual shoreline inspections are summarized in Section 4.1.3.

15.2 TARGET ANALYTE RESULTS

The following sections describe the analytical results for each medium sampled in 2012. Figure 15-1 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 2012 are summarized in Appendix C. Laboratory reports presenting the 2012 results are provided in Appendix F.

15.2.1 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 15-1 shows the locations of the wells and the analytical results of those data exceeding the endpoint criteria. Table 15-2 presents the analytical results.

DRO and BTEX compounds were not detected above the endpoint criteria in any groundwater sample collected in 2012. TAH exceeded the ADEC water quality standard (10 µg/L) in the 2012 samples collected from wells 02-231 and AS-1 at concentrations of 368 µg/L and 31 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 491 µg/L and 89 µg/L, respectively. The TAH and TAqH standards were not exceeded in the samples from well 02-232.

15.2.2 Surface Water

The surface water samples, NSWSD-07 and NSWSD-08, were analyzed for DRO, BTEX, and PAHs. TAH and TAqH were calculated from the BTEX and PAH results. Figure 15-1 shows the locations where surface water samples were collected and the analytical results. Table 15-3 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).

15.2.3 Sediment

The sediment samples (NSWSD-2, NSWSD-4, and NSWSD-5) were analyzed for DRO and PAHs. Figure 15-1 shows the locations where sediment samples were collected and the analytical results of those data in exceedance of the endpoint criteria. Table 15-4 presents the analytical results.

Table 15-2. 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	2000	1,200	39	4.3	52	220	NP	NP
Plume Source Area;	2001	**23,800**	33.4	4.37	47.3	157	NP	NP
Surface Water	2002	14,000	33	3.2	34	150	NP	NP
Protection Well	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**
02-232	2000	160 UJ	0.2 U	0.3 U	0.46 J	0.4	NP	NP
Downgradient	2001	1,780	0.2 U	0.5 U	0.5 U	0.2 UJ	NP	NP
Plume Edge;	2002	2,800	NP	NP	NP	NP	NP	NP
Surface Water	2003	1,100	NP	NP	NP	NP	NP	NP
Protection Well	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
AS-1	2006	**FP**	**FP**	**FP**	**FP**	**FP**	NP	NP
Surface Water	2007	2,800 Y	12	0.42 J	35	38.7	**86 J**	**280 JD**
Protection Well	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**
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 reporting 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 reporting 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 15-3. 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[1] (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
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	0.028 J
	2012	50 U	0.020 U	2.5 U	0.045 J
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 reporting 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 reporting 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.

DRO was detected in sediment samples NSWSD-2, NSWSD-4, and NSWSD-5 at concentrations ranging from 100 mg/kg to 1,400 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.

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 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 15-1 collected during the 2012 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.

Table 15-4. 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
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
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
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.

15.4 TREND EVALUATION

Statistical evaluations were conducted on target analyte concentrations trends in accordance with the CMP, Revision 5 (Navy 2012e). Trend evaluations were conducted for only wells that had exceedances of endpoint criteria within the last two sampling events and have a minimum of four data points. Because groundwater in all wells has been below endpoint criteria for at least the last two consecutive years, trend evaluations were not performed at this site.

15.5 CONCLUSIONS

This section presents the conclusions based on a review of LTM activities performed at the South of Runway 18-36 Area site in 2012. The conclusions are as follows:

- Groundwater Flow: Based on historic and 2012 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 2012 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Free product was observed in wells E-216 and RW-18/36-04, at respective thickness of 0.43 feet and 0.06 feet. Groundwater sampling was not planned at this location.
- Well 02-231: This well is located within the contaminant plume. The DRO concentration was observed below the endpoint criteria in 2012 and has remained below the criteria for four consecutive sampling events. BTEX concentrations have remained below their respective endpoint criteria for eight sampling events. TAH and TAqH concentrations continue to exceed their respective endpoint criteria in 2012.
- Well 02-232: This well is located within the contaminant plume. BTEX, TAH, and TAqH concentrations have remained below their respective endpoint criteria for at least four sampling events. This well is located downgradient at the edge of the plume.
- Well AS-1: This well is located within the contaminant plume. BTEX concentrations have remained below their respective endpoints for six sampling events. For the 2012 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 2012. All surface water samples collected have remained below endpoint criteria since sampling was initiated in 2006.
- Sediment Location NSWSD-2: DRO exceeded the endpoint criteria at 1,400 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: DRO exceeded the endpoint criteria at 100 mg/kg. For the first 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 2010 concentrations. Phenanthrene and 2-methylnaphthalene remained below endpoint criteria in sediment and have been below endpoint criteria for the past six 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 430 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 six 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 just south of Moffett Road Bridge. Visible petroleum contamination was also observed during sediment sampling activities in South Sweeper Creek as described above.

15.6 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 two years. Therefore, it is recommended that all monitoring at the site, including groundwater, surface water, and sediment be reduced to every odd year with the next monitoring to occur in 2013. This recommendation is consistent with CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling.

It is further recommended that monitoring at the following five wells be discontinued because of the continued lack of observance of free product: 02-518, E-209, RW-18/36-02, E-207, and Z3-2.

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 2012
- 2012 Monitoring well
- Well not monitored in 2012
- 2012 Surface water sample location
- 2012 Sediment sample location
- Piezometer
- 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	
TPH	10 µg/L
TAqH	15 µg/L
Sediment	
DRO	90.6 mg/kg

0 50 100 150 200

SCALE IN FEET

Old Trestle
NSWSD-8
South Sweeper Creek
West Canal
Crossover Canal
28-804
18/36-03
E-218
E-209
RW-18/36-07
02-518
RW-18/36-02
Z2-9
NSWSD-2
Location NSWSD-2
Sediment
DRO 1,400 Y
Z3-6
E-207
18/36-01
25
RW-18/36-05
Z 2-4
18/36-04
Z 3-2
E-206
Well 02-231
TPH 368 JD
TAqH 491 JDX
02-231
E-213
Z 4-2
LC6A
Well AS-1
TPH 31 J
TAqH 89 JDX
AS-1
E-217
NSWSD-4
Location NSWSD-4
Sediment
DRO 100 Y
Moffett Road
E-215
RW-18/36-06
18/36-05
18/36-02
10
RW-18/36-04
NSWSD-5
Well RW-18/36-04
Free Product 0.06 ft
Location NSWSD-5
Sediment
DRO 430 Y
RW-18/36-01
MRP-12
02-232
E-216
Well E-216
Free Product 0.43 ft
RW-18/36-03
Boom 6
Main Road
E-208
E-403
NSWSD-7
Sweeper Cove

U.S. NAVY	SEALASKA	**Figure 15-1** **South of Runway 18-36 Area** **Sample Locations**	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

16. 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 2012. The combination of MNA and compliance monitoring is the selected remedy for this site (Navy et al. 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.

16.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at four monitoring wells on August 30, 2012. Table 16-1 provides the measured depth to water and the calculated groundwater elevation. Figure 16-1 shows the location of the wells, the site topography and features, and the interpreted groundwater flow direction. The historic and current water level data indicate that the direction of groundwater flow beneath the site is to the south-southeast, toward Sweeper Cove. Free product was not observed in any well.

Groundwater sampling was also performed on August 30, 2012 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 16-1 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 CMP Revision 5 (Navy 2012e). The 2012 analytical results in this well are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

Table 16-1. 2012 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	15.87	6.07	0	6.21	0.234	0.0	0.00	5.77	0.0	5
01-153	24.29	18.46	5.83	0	6.22	0.253	47.1	4.16	5.70	0.0	53
MW-15-3	18.90	13.81	5.09	0	NP	NP	NP	NP	NP	NP	NP
MW15-424	21.94	18.40	3.54	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.

16.2 TARGET ANALYTE RESULTS

For the 2012 LTM event, the groundwater sample collected from well MW14-5 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 16-1 shows the location of the well and the analytical results that are in exceedance of endpoint criteria. Tables 16-2 and 16-3 present the analytical results. The historical analytical results obtained for these locations are summarized in Appendix C. Laboratory reports presenting the 2012 results are provided in Appendix F.

DRO and GRO were detected above their endpoint criteria (1,500 µg/L and 1,300 µg/L, respectively) in well MW14-5 at concentrations of 3,100 µg/L and 7,000 µg/L, respectively. Additionally, total and dissolved lead were detected above endpoint criteria (15 µg/L) in this well at 17.2 µg/L and 17.0 µg/L, respectively. No chlorinated VOC or daughter products were detected above their respective endpoint criteria.

Table 16-2. 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)
MW14-5	2003	**3,800**	**13,000**	**83.6**	**84.6**
Plume Source Area	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**
Endpoint Criteria		1,500	1,300	15	15

Notes:
Bold indicates reported concentration is greater than the 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 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 2012 LTM event, which are presented in Table 16-1, suggest that continued natural attenuation

and dechlorination may be occurring as shown by the reducing environment (low [<50] ORP) and depleted dissolved oxygen (0.0 mg/L) within the petroleum plume well at the site. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

Table 16-3. 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	2003	**27**	**10 U**	**10 U**	10 U	10 U	**10 U**
Source	2004	**7.74**	1 U	1 U	1 U	1 U	1 U
Plume	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
Endpoint Criteria		5	5	7	70	100	2

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

16.4 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 for only 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 16-4. Worksheets and graphs are provided in Appendix H.

The following are the results of the statistical evaluation:

- Well MW14-5: DRO exhibits a stable concentration with no trend at the 80 and 95 percent confidence intervals. GRO and total lead are both decreasing at the 80 percent confidence interval and the Sen's evaluations indicate statistically significant decreasing trends with median slopes of -512 and -1.63, respectively. Dissolved lead exhibits a decreasing trend at both the 80 and 95 percent confidence intervals, and the Sen's evaluation has a statistically significant downward trend with a median slope of -1.50.

- Well 01-153: The PCE trend is decreasing at the 80 and 95 percent confidence intervals, and the Sen's evaluation also indicates a statistically significant downward trend with a median slope of -1.04.

16.5 CONCLUSIONS

This section presents conclusions based on a review of the groundwater monitoring conducted in 2012 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 show evidence that petroleum biodegradation is occurring at the site, albeit weakly, possibly by aerobic digestion and iron reduction.
- Well MW14-5: This well is located within the contaminant plume. DRO, GRO, total lead, and dissolved lead were all detected above their endpoint criteria. DRO exhibits stable concentrations. GRO, total lead, and dissolved lead all exhibit statistically significant decreasing trends in concentrations.
- Well 01-153: No chlorinated VOC exceeded endpoint criteria. PCE has exceeded endpoint criteria in the past, but is exhibiting a statistically significant decreasing trend in concentration.

16.6 RECOMMENDATIONS

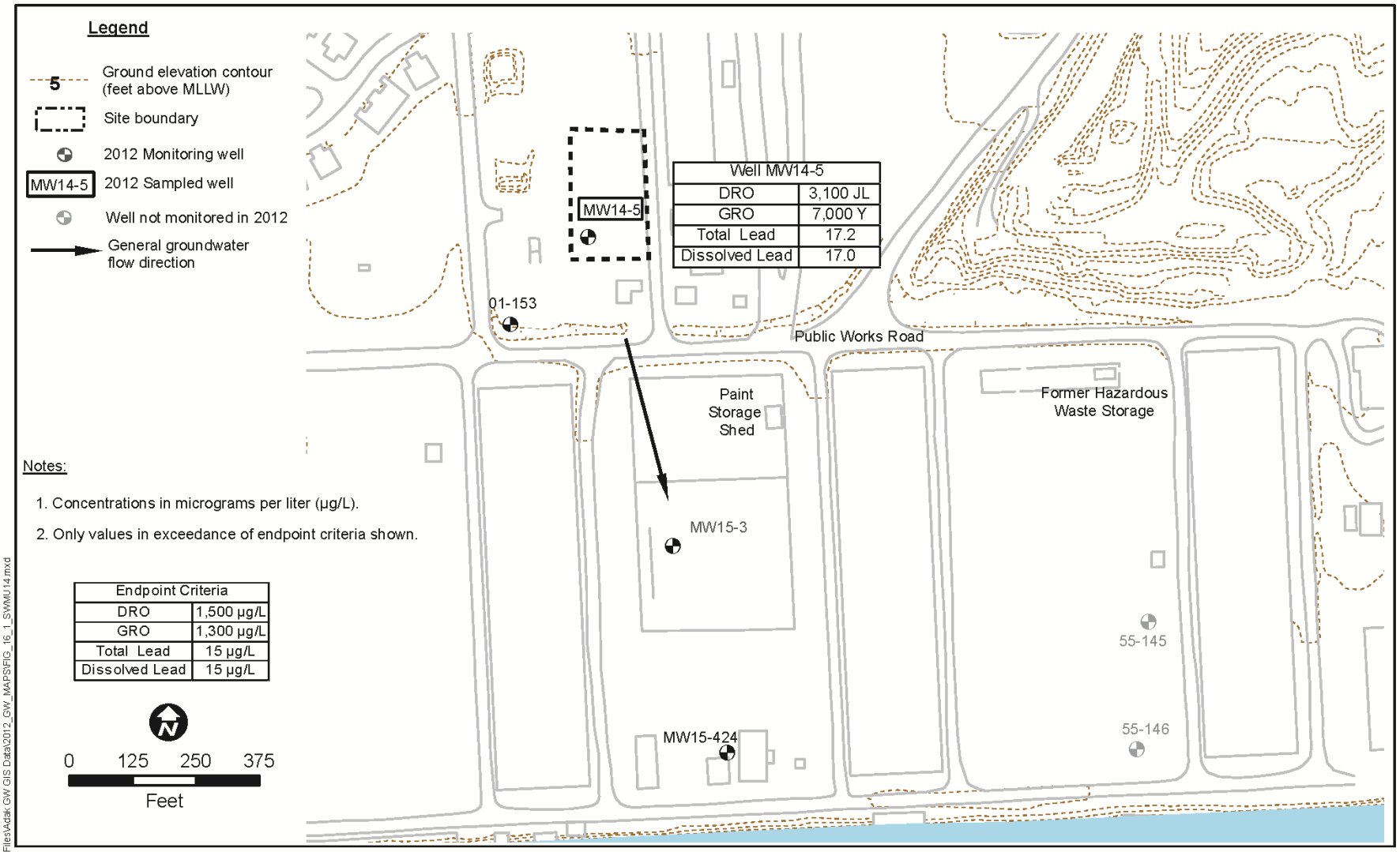
It is recommended that the biennial sampling at well 01-153 be changed to every odd year with the next sampling to occur in 2013 to be consistent with CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling.

DRO, GRO, total lead, and dissolved lead continue to exceeded endpoint criteria at MW 14-5, but exhibit stable and statistically significant decreasing trends in concentrations. Therefore, it is recommended that monitoring for these parameters be reduced to every odd year with the next sampling to occur in 2013.

Table 16-4. 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
MW14-5	DRO	Yes	5,100 Y	1,500	10	7	No trend	No trend	Stable	NC	NC	NC	NC
	GRO	Yes	11,000 DY	1,300	10	-20	Decreasing	No trend	NA	-512	Yes	-767	-220
	Total Lead	Yes	17.2	15	10	-19	Decreasing	No trend	NA	-1.63	Yes	-2.37	-0.95
	Dissolved Lead	Yes	17.0	15	10	-21	Decreasing	Decreasing	NA	-1.50	Yes	-2.36	-0.743
01-153	PCE	No	6.0	5	9	-22	Decreasing	Decreasing	NA	-1.04	Yes	-2.30	-0.548

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 16-1 SWMU 14, Old Pesticide Storage and Disposal Area Sample Locations	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

Date: 5/15/2013
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17. 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 2012. 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 et al. 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 2012e). Annual monitoring under the program in 2012 includes groundwater sampling and water level/product thickness monitoring. The 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 endpoints at 10 times the ADEC Table C values (18 AAC 75.345), to determine whether natural attenuation is occurring, to compare groundwater quality to endpoint criteria for compliance monitoring, 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 analysis for historical target analyte concentration data, conclusions based on these analyses, and recommendations for future monitoring activities at the site.

17.1 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 four monitoring wells on September 4, 2012. Table 17-1 provides the measured depth to water and the calculated groundwater elevation. No free product was observed in any site well.

Figure 17-1 shows the location of the wells, the site topography and features, and the interpreted groundwater flow direction. Historic and current water level 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.

Table 17-1. 2012 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	15.98	3.02	0	6.61	0.525	19	0.00	7.05	0.0	-76
05-375	13.00	4.33	8.67	0	6.19	0.444	4	0.00	10.37	0.0	-45
PP-05	38.47	10.91	27.56	0	6.41	0.666	43	0.00	8.35	0.0	-56
R-1	13.43	2.24	11.19	0	6.47	0.482	3	1.48	7.62	0.0	-23

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.

Field measurements were recorded in the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 17-1 lists the final field measurements recorded at the monitoring well prior to sample collection. A review of the sampling data indicates that groundwater parameters stabilize to within specified criteria for all wells prior to sample collection.

17.2 TARGET ANALYTE RESULTS

The groundwater samples from three monitoring wells, 05-375, PP-05, and R-1 were analyzed for DRO. The groundwater sample from monitoring well 05-735 was analyzed for select chlorinated VOCs (PCE, TCE, and daughter products). Figure 17-1 shows the location of the wells and the analytical results that are in exceedance of endpoint criteria. Tables 17-2 and 17-3 present the analytical results. Historical analytical results obtained for these locations are summarized in Appendix C. Laboratory reports presenting the 2012 results are provided in Appendix F.

DRO was not detected above the endpoint criteria of 15,000 µg /L at any of the wells sampled. 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 at 2.7 µg/L and 240 µg/L, respectively. No PCE, TCE, or any other daughter product was detected above endpoint criteria in this sample.

17.3 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 concentrations, depleted sulfates, and elevated methane concentrations in comparison to background conditions. Natural attenuation by dechlorination was also 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 2012 LTM event, which are presented in Table 17-1, provide evidence of continued natural attenuation and dechlorination as shown by the generally reducing environment (negative ORP), depleted dissolved oxygen (0.0 mg/L), and continued decreasing chlorinated compounds in well 05-735. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

Table 17-2. Analytical Results for Petroleum-Related Chemicals for SWMU 17, Power Plant No. 3 Area

Well Location	Year	DRO (µg/L)
05-375	2001	698
Downgradient	2002	460
	2003	480
	2004	600
	2005	554 J
	2006	680
	2007	760 Y
	2008	640 Y
	2009	NP
	2010	690 Y
	2011	NP
	2012	600 Y
PP-05	2007	**FP**
Source Plume	2008	**FP**
	2009	8,500 Y
	2010	8,500 YJ
	2011	NP
	2012	5,200 Y
R-1	2001	3,730
Downgradient	2002	NP
	2003	1,200
	2004	1,590
	2005	1,040 J
	2006	1,600
	2007	1,200 Y
	2008	1,100 Y
	2009	NP
	2010	1,300 Y
	2011	NP
	2012	1,000 Y
Endpoint Criteria		15,000

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

17.4 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 for only 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 17-4. Worksheets and graphs are provided in Appendix H.

Table 17-3. 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**
Endpoint Criteria		5	5	7	70	100	2

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

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 -27.3. 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 -0.278.

17.5 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 2012. The conclusions are as follows:

- Groundwater Flow: Based on historic and current field measurements and site topography, the interpreted groundwater flow direction is toward Yakutat Creek, which flows around the site on the northeast, east, southeast, and south.
- MNA: The groundwater parameters obtained during the 2012 LTM event provided 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. These are breakdown products of PCE and TCE, which have been detected below the endpoint criteria for four consecutive sampling events. Vinyl chloride and cis-1,2-DCE exhibit decreasing trends that are significant based on statistical analysis.
- Wells 05-375, PP-05, and R-1: DRO remained below endpoint criteria in all these wells for at least three consecutive sampling events.

17.6 RECOMMENDATIONS

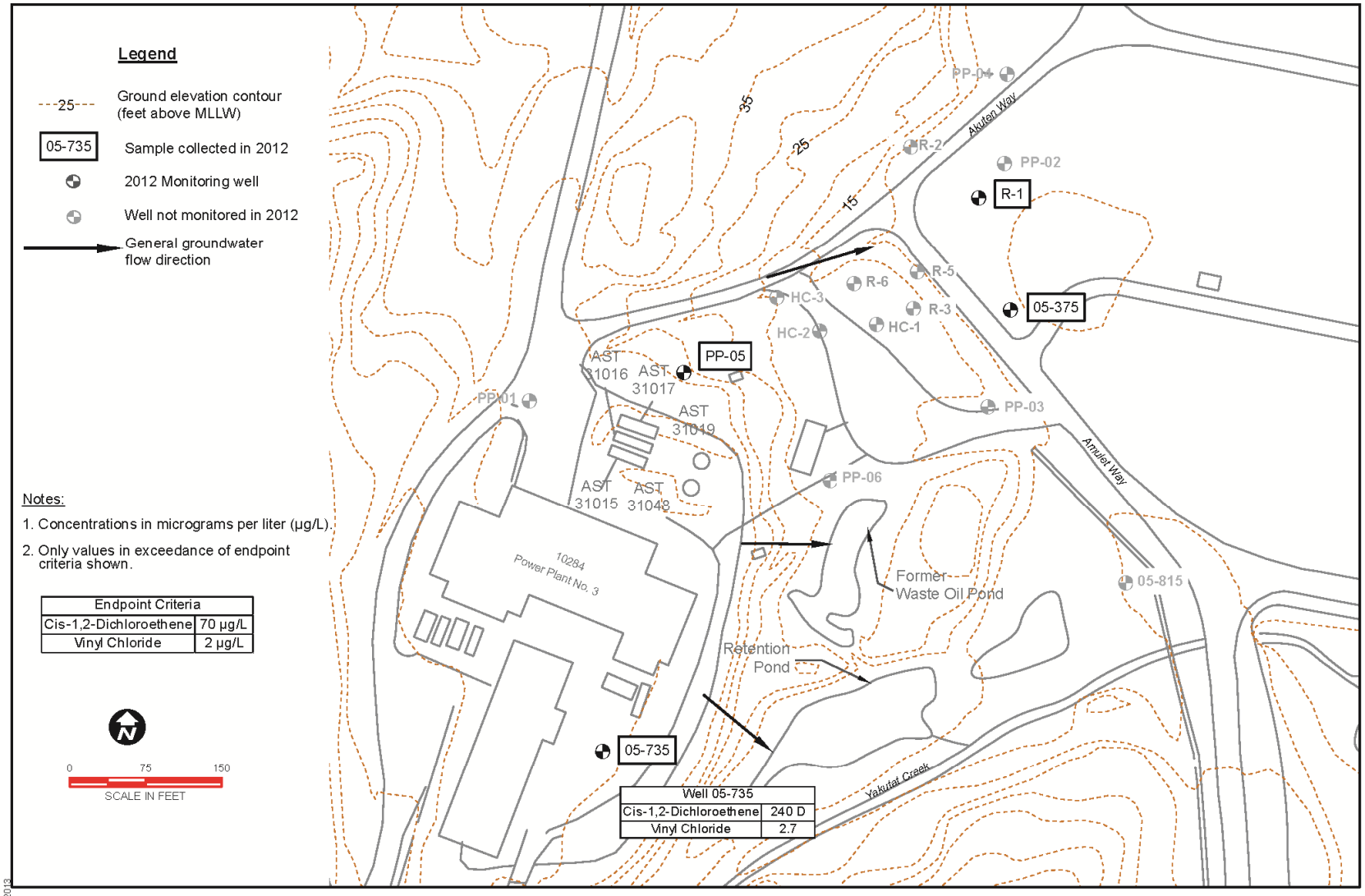
Because concentrations of DRO have remained below endpoint criteria in wells 05-375, PP-05, and R-1 for at least three consecutive sampling events and because free product is no longer observed in these wells, it is recommended that monitoring at these locations be discontinued.

Vinyl chloride and cis-1,2-DCE remain above endpoint criteria in compliance well 05-375 but are exhibiting statistically significant decreasing concentrations. Therefore, it is recommended that monitoring at this location be reduced to every odd year with the next sampling occurring in 2013. This is consistent with the CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling.

Table 17-4. 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	280 DJ	70	10	-32	Decreasing	Decreasing	NA	-27.3	Yes	-35.8	-2.50
	Vinyl Chloride	Yes	2.8	2	10	-29	Decreasing	Decreasing	NA	-0.278	Yes	-0.50	-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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U.S. NAVY	SEALASKA	Figure 17-1 SWMU 17, Power Plant No. 3 Area Sample Locations	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

18. SWMU 58/SA 73, HEATING PLANT 6

This section presents the results of groundwater monitoring performed at the SWMU 58/SA 73, Heating Plant 6 site during 2012. The remedy specified for this site in the OU A ROD is free product recovery (Navy et al. 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 initiated annual groundwater sampling and water level/product thickness monitoring. The 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 for endpoint criteria established at 10 times the ADEC Table C values (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.

18.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at 11 monitoring wells on August 29, 2012. Table 18-1 provides the measured depths to water, the calculated groundwater elevations, and the product thicknesses, if present. Groundwater elevations were corrected for the presence of free product (Appendix D). Figure 18-1 shows the locations of the wells, the site topography and features, and the interpreted groundwater flow direction.

The site is underlain by a relatively thin layer of tephra and glacial till overlying bedrock. The aquifer is characterized as intermittent within the more permeable zones of the overlying surficial material (Navy 2004). The water level data indicate that the direction of groundwater flow in this aquifer is to the southeast, toward Clam Lagoon.

Three monitoring wells were sampled on August 31, 2012 (Figure 18-1). Sampling was planned at well 12-121 but 0.03 feet of free product was observed here; therefore, sampling was not conducted as prescribed by the CMP. Field measurements were recorded in the field forms and logbooks during monitoring well sampling activities (Appendix A).

Table 18-1. 2012 Field Measurements for SWMU 58/SA 73, Heating Plant 6

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)
12-105	73.26	10.78	62.48	0	6.17	0.694	0.0	0.00	9.22	0.0	-61
12-106	72.99	10.54	62.45	0	NP	NP	NP	NP	NP	NP	NP
12-114	70.97	10.01	60.96	0	5.73	0.362	0	0.00	6.94	0.0	14
12-121	76.01	13. 66[1]	62.35[1]	0.03	FP	FP	FP	FP	FP	FP	FP
12-124	77.08	13.13	63.95	0	NP	NP	NP	NP	NP	NP	NP
12-125	73.52	10.93	62.59	0	NP	NP	NP	NP	NP	NP	NP
12-203	76.11	12.77	63.34	0	6.50	0.971	5	0.00	6.98	0.0	-118
12-601	63.75	4.40	59.35	0	NP	NP	NP	NP	NP	NP	NP
12-604	46.39	10.90	35.49	0	NP	NP	NP	NP	NP	NP	NP
12-610	65.66	16.35	49.31	0	NP	NP	NP	NP	NP	NP	NP
12-611	58.11	4.08	54.03	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.

Table 18-1 lists the final field measurements recorded at each monitoring well prior to sample collection. A review of the sampling data reported for this site indicated that prior to sample collection, all groundwater parameters stabilized in wells 12-105 and 12-203. However, groundwater parameters did not stabilize in well 12-114 and the required three casing volumes of groundwater were removed prior to sampling per CMP Revision 5 (Navy 2012e). The 2012 analytical results in this well are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

Monthly free product recovery activities were performed at this site during contract year 2011/2012 (October through September). No free product was recovered from the site during this time period. Monthly free product recovery activities are summarized in Appendix J.

A shoreline inspection was performed along the stream from the top of the ravine to downgradient of well 12-604. No flowing water was observed in the perennial stream. No evidence of petroleum contamination was observed during the shoreline inspection. Surface water/sediment sampling was to be performed at this location if contamination was observed during the inspection. Since no contamination was observed, surface water/sediment sampling was not performed. Shoreline inspection results are summarized in Section 4.1.3.

18.2 TARGET ANALYTE RESULTS

The groundwater samples collected from wells 12-105, 12-114, and 12-203 were analyzed for DRO. Table 18-2 presents the analytical results. Figure 18-1 shows the location of the wells and the analytical results that exceeded the endpoint criteria. The historical analytical results obtained for these locations are summarized in Appendix C. Laboratory reports presenting the 2012 results are provided in Appendix F.

DRO concentrations for all wells were below the endpoint criteria (15,000 µg/L) in 2012.

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 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 collected during the 2012 LTM event, which are presented in Table 18-1, 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. A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

Table 18-2. Analytical Results for Petroleum-Related Chemicals for SWMU 58/SA 73, Heating Plant 6

Well Location	Year	DRO (µg/L)
12-105	2008	7,800 Y
Downgradient	2009	**FP**
Plume Edge	2010	6,400 Y
	2011	5,900 Y
	2012	7,300 YJ
12-114	2002	9,400
Downgradient	2005	2,080 J
Plume Edge	2006	6,800
	2007	NP
	2008	2,900 Y
	2009	NP
	2010	4,300 Y
	2011	NP
	2012	1,700 YJ
12-121	2002	**19,000**
Cross-Gradient	2005	14,300
Plume Edge	2006	**FP**
	2007	**28,000 Y**
	2008	**FP**
	2009	9,500 Y
	2010	1,300 YJ
	2011	6,800 Y
	2012	**FP**
12-203	2004	**51,900 J**
Plume Source Area	2005	**FP**
	2006	**FP**
	2007	**FP**
	2008	**FP**
	2009	**FP**
	2010	**17,000 Y**
	2011	15,000 Y
	2012	14,000 YJ
Endpoint Criteria[1]		15,000

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

18.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012e). Trend evaluation is conducted for only analytes that exceeded the endpoint criteria within the last two sampling events and had a minimum of four data points. Because the target analytes did not meet these requirements, no evaluation was performed for this site.

18.5 CONCLUSIONS

This section presents conclusions based on groundwater monitoring conducted at SWMU 58/SA 73, Heating Plant 6 site in 2012. The conclusions are as follows:

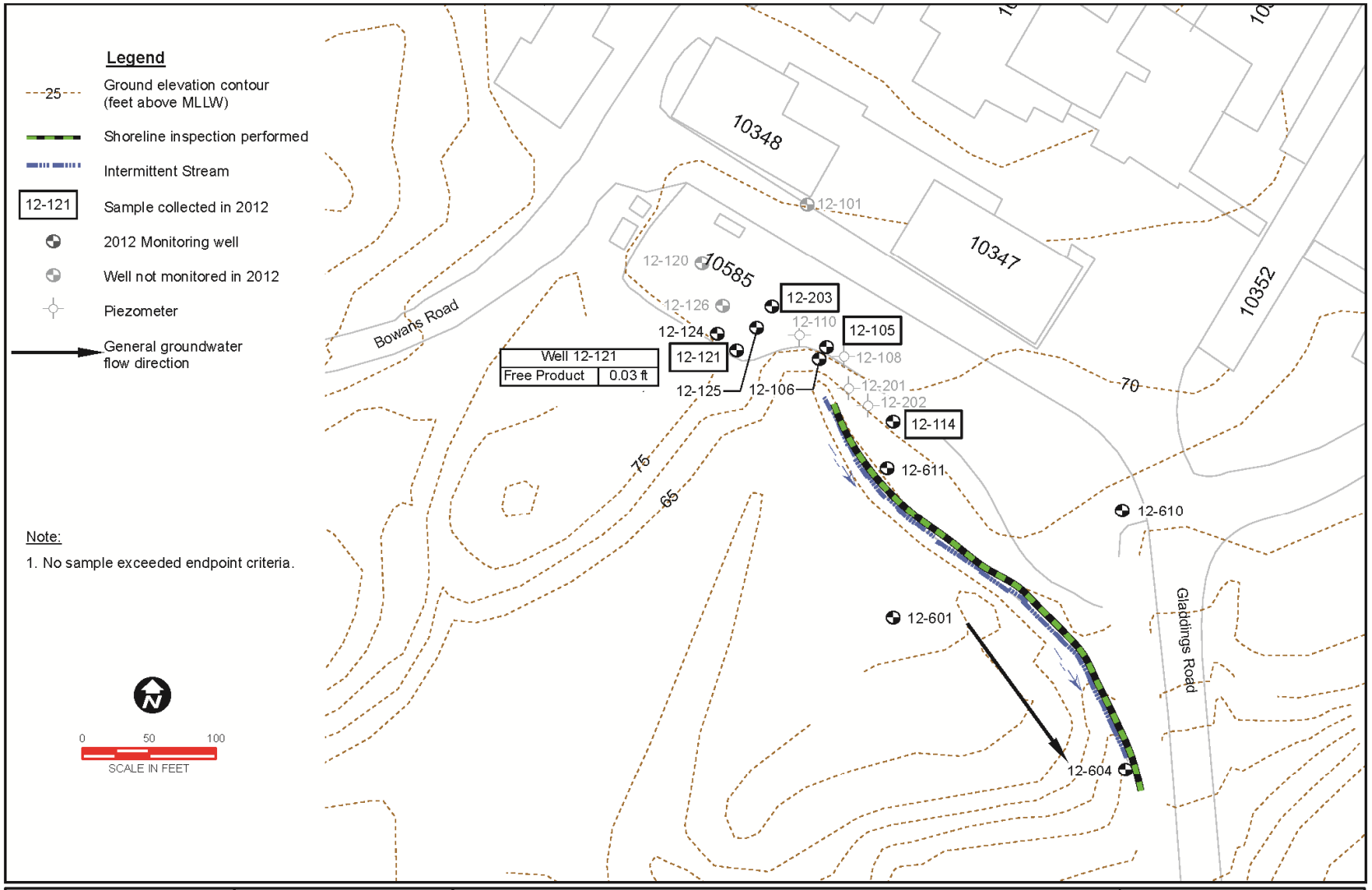
- Groundwater Flow: Based on the field measurements in August 2012, the groundwater flow direction is to the southeast toward Clam Lagoon.
- MNA: The groundwater parameter data obtained during the 2012 LTM event provides evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Free product was present in well 12-121 at a thickness of 0.03 feet. No free product was recovered from the site during monthly activities from October 2011 through September 2012 (Appendix J).
- Well 12-105: DRO was detected below the endpoint criteria at this downgradient plume edge well since 2010 (three consecutive sampling events).
- Well 12-114: DRO has been detected below the endpoint criteria at this downgradient plume edge well since sampling began in 2002 (six consecutive sampling events).
- Well 12-121: Free product was detected at 0.03 feet which prevented sampling of groundwater. Free product has been observed twice in this well since 2009 at a minimal thickness of 0.01 feet. DRO has not exceeded endpoint criteria in this well since 2007 (three consecutive sampling events).
- Well 12-203: DRO has remained at or below endpoint criteria in this well since 2010 (two consecutive sampling events).
- A shoreline inspection of the intermittent stream flowing through the site revealed no evidence of petroleum contamination. The stream bed is thickly vegetated and marshy.

18.6 RECOMMENDATIONS

It is recommended that monitoring at this site be discontinued and the site be recommended for closure based on the following reasons:

- DRO concentrations have remained below endpoint criteria for at least two consecutive sampling events;

- The observance of free product across the site has greatly reduced and was observed in only one well at a thickness of 0.03 feet;
- No free product was recovered from the site from October 2011 to September 2012; and
- There was no evidence of petroleum contamination in the intermittent stream that flows through the site.



U.S. NAVY	SEALASKA	Figure 18-1 SWMU 58/SA 73, Heating Plant 6 Sample Locations	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

19. SWMU 60, TANK FARM A

This section presents the results of groundwater monitoring performed at the SWMU 60, Tank Farm A site during 2012. MNA is the remedy selected for this site (Navy et al. 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.

19.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at six monitoring wells on September 5, 2012. Table 19-1 provides the measured depths to water (corrected for product thickness, if present) and the calculated groundwater elevations. One well, 653, had measurable free product at 0.01 feet in thickness. Figure 19-1 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 water level data and the hydrogeologic 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.

Table 19-1. 2012 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	10.09	3.02	0	6.34	0.333	97.4	0.00	7.75	0.0	-35
651	12.08	9.11	2.97	0	6.27	0.300	69.0	0.00	6.66	0.0	-39
652	12.37	9.40	2.97	0	6.42	0.609	60.0	0.00	7.47	0.0	-100
653	15.10	10.15[1]	4.95[1]	0.01	5.80	0.149	32.9	0.00	9.15	0.0	108
LC5A	10.86	6.23	4.63	0	6.60	0.257	0.0	0.00	10.42	0.0	-83
MW-E006	156.42	6.07	150.35	0	6.61	0.465	53.5	0.00	6.52	0.0	-81
Surface Water Samples											
852	NA	NA	NA	NA	6.21	14.4	20	8.33	14.4	0.3	-51

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.

Four monitoring wells were sampled on September 5, 2012. Surface water and sediment samples were collected on August 28, 2012 at location 852 during minus low tide. Because of the very low tide conditions, the nearest surface water to the sediment sample location available for sampling was approximately 75 feet away and to the east (Photographs 111 and 112, Appendix I). Field measurements were recorded on field data forms and logbooks during monitoring well sampling activities (Appendix A). Table 19-1 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, 653, and MW-E006) stabilized prior to sample collection. The remaining three wells did not stabilize, which required three casing volumes of groundwater be removed from each well prior to sampling per CMP Revision 5 (Navy 2012e). The 2012 analytical results in these wells are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

A visual inspection of the southwestern shoreline of South Sweeper Creek downgradient of LC5A was performed in 2012. During the inspection, a petroleum seep, oily sediments, heavy petroleum odor, iron staining, and sheen/discoloration were observed on the west side of Sweeper Creek lagoon adjacent to the west culvert (Figure 19-1). 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 fell below endpoint criteria for the first time since 2008. However, DRO concentrations in sediment rose from 1,400 mg/kg in 2011 to 10,000 mg/kg in 2012 (described in more detail below). Petroleum sheen and odor were observed when sediments were disturbed during the sample collection at location 852. Due to the minus tide, the surface water sample was collected approximately 75 feet from the seep where the sediment portion was collected. Results of visual inspections are summarized in Section 4.1.3.

A boom is being maintained at this 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 2011 through September 2012. A total of 0.20 gallons 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 for Adak, Alaska (Navy 2013).

19.2 TARGET ANALYTE RESULTS

The groundwater samples collected from monitoring wells 650, 651, 652, and 653, and surface water sample 852 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 19-2, 19-3, and 19-4 present the groundwater, surface water, and sediment analytical results, respectively. Historical analytical results obtained for these locations are summarized in Appendix C. Laboratory reports presenting the 2012 results are provided in Appendix F.

DRO concentrations for the lowland wells 650 (1,600 µg /L), 652 (4,000 µg /L,), and 653 (1,900 µg/L) all exceeded the endpoint criteria of 1,500 µg /L. The remaining lowland well sampled for DRO in 2012 (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, 652, 653, and LC5A except for benzene which was detected above the endpoint criteria in well 650 at a concentration of 10 µg/L. TAH and TAqH concentrations exceeded the respective water quality standards of 10 µg/L and15 µg/L in all lowland wells, 650, 651, 652, 653, and LC5A. TAH concentrations ranged from 7.4 µg/L to 93 µg/L and TAqH concentrations ranged from 10.3 µg/L to 127 µg/L in these wells.

Benzene was detected at a concentration criteria in upland well MW-E006 which did not exceed the endpoint criteria of 5.0 µg/L.

DRO (130 µg/L) was detected below the risk-based cleanup level of 250 µg/L in the surface water sample collected at the 852 sample location. The concentrations of TAH, TAqH, and indeno(1,2,3-cd)pyrene were also detected in this sample below endpoint criteria.

DRO was detected in sediment sample 852 at 10,000 mg/kg, which exceeded the endpoint criteria of 90.6 mg/kg. Phenanthrene was not detected in sample 852 but the method detection limit of 0.470 mg/kg was elevated above the endpoint criteria of 0.225 mg/kg due to matrix interferences. 2-methylnaphthalene was detected in this sample below the endpoint criteria of 0.0202 mg/kg.

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 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 19-1 collected during

the 2012 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.

Table 19-2. 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	2011	1,100 Y	4.6	0.28 J	0.29 J	1.09 J	6.3 J	8.7 JX
Downgradient	2012	**1,600 Y**	**10**	0.70 U	0.25 J	0.61 J	**10.9 J**	**11.6 JX**
651	2011	1,200 Y	2.7	1.2	24	79	**107**	**137 D**
Downgradient	2012	1,300 Y	2.9	1.7	22	67	**93**	**127 D**
652	2011	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
Plume Source Area	2012	**4,000 Y**	4.9	1.4	32 J	52 J	**90 J**	**127 JD**
653	2011	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
Plume Source Area	2012	**1,900 Y**	0.50 U	0.50 U	1.2	6.2 J	**7.4 J**	**10.3 J**
LC5A	2002	1,100	NP	NP	NP	NP	NP	NP
Downgradient	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**
MW-E006	2002	532 U	NP	NP	NP	NP	NP	NP
Plume Source Area	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
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 reporting 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 reporting limits when none were detected.

[3] 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 19-3. 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	2006	**900**	0.10 U	6.0 U	0.45 J
Downgradient	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
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 reporting 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 reporting 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 19-4. Analytical Results for Sediment at SWMU 60, Tank Farm A

Location	Year	DRO (mg/kg)	2-Methylnaphthalene (mg/kg)	Phenanthrene (mg/kg)
852	2006	**260 J**	0.0068 J	0.031
Downgradient	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]**
Endpoint Criteria		90.6	0.0202	0.225

Notes:
[1] Reporting 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.

19.4 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 for only 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 19-5. Worksheets and graphs are provided in Appendix H.

Table 19-5. Concentration Trend Evaluation for SWMU 60, Tank Farm A

							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-E006	Benzene	No	7.4	5	10	-23	Decreasing	Decreasing	NA	-1.45	Yes	-1.72	-0.40

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 is the result of the statistical evaluation:

- Well MW-E006: Benzene exhibits a decreasing trend at the 80 and 95 percent confidence intervals, with a Sen's evaluation that indicates a statistically significant downward trend with a median slope of -1.45

19.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring conducted at the SWMU 60, Tank Farm A site in 2012. 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 2012 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- Free product was observed in well 653 at thicknesses of 0.01 feet. A total of 0.20 gallons of free product was removed from the site during October 2011 through September 2012.
- Well 650: This well is located within the contaminant plume. The DRO and benzene concentrations were observed at concentrations of 1,600 µg/L and 10 µg/L, respectively, which were above endpoint criteria. TAH and TAqH concentrations in groundwater were above ADEC water quality standards at 10.0 µg/L and 11.6 µg/L, respectively. Toluene, ethylbenzene, and total xylene concentrations were all 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 93 µg/L and 127 µg/L, respectively.
- Well 652: This well is located within the contaminant plume. DRO was observed at a concentration of 4,000 µg /L which was above endpoint criteria. TAH and TAqH concentrations in groundwater were above ADEC water quality standards at 90 µg/L and 127 µg/L, respectively. BTEX concentrations were all below endpoint criteria.

- Well 653: This well is located within the contaminant plume. The DRO was observed at a concentration of 1,900 µg /L which was above endpoint criteria. TAH and TAqH concentrations in groundwater were above ADEC water quality standards at 7.4 µg/L and 10.3 µg/L, respectively. BTEX concentrations were all below endpoint criteria.
- Well LC5A: BTEX concentrations were observed below endpoint criteria for the fifth consecutive sampling event in this downgradient well. TAH and TAqH concentrations in groundwater exceeded ADEC water quality standards at 56 µg/L and 106 µg/L, respectively.
- Well MW-E006: The benzene concentration dropped below the endpoint criteria in 2012, at a concentration of 4.7 µg/L. The analysis indicates a statistically significantly decreasing trend in benzene concentration at the 80 and 95 percent confidence level.
- 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. This may have been because the surface water was collected approximately 75 feet downgradient from the sediment sample location at the seep due to low tide conditions. DRO exceeded the endpoint criteria in sediment at this location in 2012 at a concentration of 10,000 µg/L. This is an increase compared to the 2011 concentrations which was 1,400 mg/kg. Indeno(1,2,3-cd)pyrene, TAH, and TAqH remained below their respective surface water endpoint criteria and have been below the criteria for six consecutive sampling events. 2-Methylnaphthalene dropped below the sediment endpoint criteria in 2012. This contaminant exceeded sediment endpoint criteria in both 2010 and 2011. Phenanthrene remained below its respective sediment endpoint criteria; however, the method detection limit was elevated above the endpoint criteria due to matrix interferences. Phenanthrene has remained below the sediment endpoint criteria for five consecutive sampling events.
- A petroleum seep is located downgradient of well 652 on the northwestern shoreline of South Sweeper Creek lagoon. Adsorbent booms are being maintained monthly at this location to control sheen on surface water from the shoreline petroleum seep. Oily sediments, strong petroleum odor, sheen, and iron staining was observed behind the boom.

19.6 RECOMMENDATIONS

The benzene concentration in upland well MW-E006 dropped below endpoint criteria in 2012 and exhibits a statistically significant decreasing trend. TAH and TAqH have continued to exceed endpoint criteria at well LC5A since sampling began in 2008. However, BTEX concentrations have remained below endpoint criteria since 2008. Therefore, it is recommended that monitoring at these locations be reduced to every odd year with the next sampling to occur in 2013. This is consistent with the CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling.

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. If 2013 monitoring results continue to show only incremental changes to previous years' results, it is recommended that monitoring at the site be reduced to every odd year.

Legend

- 25 — Ground elevation contour (feet above MLLW)
- Shoreline inspection performed
- Main Road Pipeline
- Petroleum seep
- LC5A — Sample collected in 2012
- 2012 Monitoring well
- Well not monitored in 2012
- 2012 Surface water/ sediment sample
- Approximate groundwater flow direction

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

0 100 200
SCALE IN FEET

MW-E006
MW E501
Access Road
Moffett Road
Whiting Road
Main Road
Main Road
Dumbell Lake
West Canal
South Sweeper Creek
Sweeper Cove
Boom 4
Boom 10
Boom 6
LC5A
651
650
653
852
652

Well 650	
DRO	1,600 Y
Benzene	10
TAH	10.9 J
TAqH	11.6 JX

Well 651	
TAH	93
TAqH	127 D

Well LC5A	
TPH	56 J
TAqH	106 DJ

Well 653	
Free Product	0.01 ft
DRO	1,900 Y
TAH	7.4 J
TAqH	10.3 J

Location 852	
Sediment	
DRO	10,000 DY

Well 652	
DRO	4,000 Y
TAH	90 J
TAqH	127 JD

U.S. NAVY	SEALASKA	**Figure 19-1** **SWMU 60, Tank Farm A** **Sample Locations**	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

20. SWMU 61, TANK FARM B

This section presents the results of groundwater monitoring performed at the SWMU 61, Tank Farm B site during 2012. The remedy specified for this site in the OU A ROD is MNA (Navy et al. 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.

20.1 FIELD MEASUREMENTS

The monitoring wells were gauged and sampled on September 1, 2012. Depth-to-water and product thickness measurements were collected at three monitoring wells. Table 20-1 provides the measured depths to groundwater and the calculated groundwater elevations. No free product was detected in any of the site wells. Figure 20-1 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. Water level data and the hydrogeologic 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.

Table 20-1. 2012 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	9.14	3.07	6.07	0	6.55	0.533	121.0	5.23	8.47	0.0	-77
14-210	12.12	2.34	9.78	0	6.40	0.362	2.6	5.29	9.15	0.0	-46
TFB-MW4B	37.44	4.62	32.82	0	6.39	0.392	0.0	0.00	7.63	0.0	-30
Surface Water Samples											
NL-04	NA	NA	NA	NA	6.24	0.166	5	9.41	8.96	0.0	51
NL-D-04	NA	NA	NA	NA	5.98	0.159	4	9.02	9.27	0.0	123

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.

Three wells were sampled on September 1 and 6, 2012. Field measurements were recorded on field data forms and logbooks during monitoring well sampling activities (Appendix A). Table 20-1 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 each of these wells prior to sampling per CMP Revision 5 (Navy 2012e). The 2012 analytical results in these wells are consistent with past analytical results and appear to be unaffected by the lack of stabilization.

On September 6, 2012, two surface water and sediment samples (locations NL-04 and NL-D-04) were collected from the western shoreline of North Sweeper Creek downgradient of monitoring well 14-113 (Figure 20-1) to determine whether petroleum contamination from groundwater is impacting surface water. Sample NL-04 was collected immediately downgradient of well 14-113. Sample NL-D-04 was collected approximately 70 feet downstream of NL-04 but upgradient of the confluence with an unnamed stream (Figure 20-1). It should be noted that these samples were collected from a swampy wetland. Both sediment samples contained high moisture content that resulted elevated method detection limits.

An inspection of the western shoreline of North Sweeper Creek was performed in 2012 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. This inspection was performed because in 2010 groundwater exceeded endpoint criteria in surface water protection for well 14-113 and in sediment at locations NL-04 and NL-D-04. No evidence of petroleum contamination was observed during the inspection or during collection of samples from locations NL-04 and NL-D-04. Shoreline inspection information is also summarized in Section 4.

20.2 TARGET ANALYTE RESULTS

The following sections describe the analytical results for each medium sampled in 2012. Historical analytical results obtained for these locations are summarized in Appendix C. Laboratory reports presenting the 2012 results are provided in Appendix F.

20.2.1 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 2012e). Table 20-2 presents the groundwater analytical results.

GRO was detected above the endpoint criteria (1,300 µg/L) in the samples collected from wells 14-113 (2,000 µg/L), 14-210 (2,400 µg/L), and TFB-MW4B (36,000 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 24 µg/L, respectively.

Table 20-2. 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**
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
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
Endpoint Criteria		1,300	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 reporting 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 reporting limits when none were detected.

[3] ADEC water quality standard as specified in 18 AAC 70.

Bold indicates reported concentration is greater than the endpoint criteria or water quality standard.

Groundwater collected from well TFB-MW4B also exceeded endpoint criteria with the observed concentrations of toluene (4,800 µg/L), ethylbenzene (2,100 µg/L), and total xylenes (15,600 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 704 µg/L.

20.2.2 Surface Water

The surface water samples collected at locations NL-04 and NL-D-04 were analyzed for GRO, BTEX, and PAHs (for calculation of TAH and TAqH). Surface water analytical results were compared to CMP, Revision 5 (Navy 2012e) South Sweeper Creek endpoint criteria and State of Alaska surface water criteria. Table 20-3 presents the surface water analytical results.

Table 20-3. 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
NL-D-04	2009	26 J	2.5 U	2.85 U
	2010	100 U	2.5 U	2.86 U
	2011	100 U	0.53 J	0.53 J
	2012	100 U	0.19 J	0.23 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 reporting 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 reporting 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.

DRO, GRO, TAH, and TAqH were not detected above surface water endpoint criteria or water quality standards (250 µg/L, 114 µg/L, 10 µg/L, and 15 µg/L, respectively) at any surface water sample location.

20.2.3 Sediment

Sediment samples collected at NL-04 and NL-D-04 were analyzed for GRO and BTEX. Sediment analytical results were compared to CMP, Revision 5 (Navy 2012e) South Sweeper

Creek endpoint criteria. Table 20-4 presents the sediment analytical results. GRO and BTEX were not detected in either sediment sample; however, the GRO method detection limits for these samples exceeded the 12.2 mg/kg endpoint criteria due to high water content in the samples.

Table 20-4. 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
NL-D-04	2009	**16 U**[2,3]	0.22 U	0.22 U	0.22 U	0.096 J
	2010	**24 U**[2,3]	0.72 UJ	0.72 UJ	0.72 UJ	1.4 UJ
	2011	**26 U**[2,3]	0.78 U	0.78 U	0.78 U	1.6 U
	2012	**27 U**[2,3]	0.90 UJ	0.90 UJ	0.90 UJ	1.8 UJ
Endpoint Criteria[4]		12.2	None	None	None	None

[1] Value is reported from the field duplicate sample because the sample result was a non-detect with a method reporting limit greater than the endpoint criteria.
[2] Value is the method detection limit because the reporting 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.

20.3 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 occurs here which is caused by the microbiological degradation of naturally occurring organic matter in saturated surface soils, resulting in a geochemical signature that may be indistinguishable from petroleum hydrocarbon degradation. Wetland methanogenesis is suspected to occur at the low-lying sample location (wells 14-113 and 14-210 and surface water/sediment locations NL-04 and NL-D-04).

The groundwater parameters presented in Table 20-1, which were collected during the 2012 LTM event, support evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and low dissolved oxygen concentrations (0 mg/L) in the upland onsite source area well TFB-MW4B, where the wetland does not occur.

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.

20.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012e). Trend evaluation is conducted for only 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 20-5. 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 the 80 percent confidence interval. 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 -2.99.
- Well 14-210: GRO exhibits no trend at either the 80 or 95 percent confidence interval. The coefficient of variation indicates a stable concentration.
- 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 -2.94.
  - The toluene and ethylbenzene concentrations exhibit no trend at either the 80 or 95 percent confidence intervals. The coefficient of variation indicates the concentrations are stable.
  - The total xylenes concentration exhibits an increasing trend at both the 80 and 95 percent confidence intervals.

Table 20-5. 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	3,400 Y	1,300	10	-15	Decreasing	No trend	NA	-290	No	-580	0
	Benzene	Yes	8.3	5	10	-41	Decreasing	Decreasing	NA	-2.99	Yes	-3.5	-2.0
14-210	GRO	Yes	2,400 Y	1,300	10	-5	No trend	No trend	Stable	NC	NC	NC	NC
TFB-MW4B	GRO	Yes	51,000 DY	1,300	10	5	No trend	No trend	Stable	NC	NC	NC	NC
	Benzene	Yes	24 D	5	10	-36	Decreasing	Decreasing	NA	-2.94	Yes	-4.0	-1.6
	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	10	No trend	No trend	Stable	NC	NC	NC	NC
	Total Xylenes	Yes	15,600 D	10,000	10	25	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.

20.5 CONCLUSIONS

This section presents the conclusions based on a review of monitoring performed at the SWMU 61, Tank Farm B site in 2012. The conclusions are as follows:

- Groundwater Flow: The 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 2012 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 2012.
- 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. Benzene also exhibits a statistically significant decreasing trend at both the 80 and 95 percent confidence intervals. 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 completed within the wetland and is located adjacent to North Sweeper Creek.
- Well 14-210: GRO has been detected above the endpoint criteria since 2001 and exhibits a stable concentration in this downgradient well. 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 completed within the 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. Total xylene concentrations show increasing concentration trends. GRO, ethylbenzene, and toluene concentrations are stable. It should be noted that ethylbenzene concentrations exhibited increasing trends in 2011.

- 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 undetected in sediment, but the method detection limit exceeded the endpoint criteria due to high water content in the sample. No petroleum odor or sheen was observed when sediment was disturbed during sampling activities.
- Sample location NL-D-04: Surface water and sediment samples were collected approximately 70 feet downgradient of NL-04. GRO was undetected in sediment, but the method detection limit exceeded the endpoint criteria due to high water content in the sample. BTEX was not detected in the sediment. No petroleum odor or sheen was observed when sediment was disturbed during sampling activities.
- A shoreline inspection of North Sweeper Creek revealed no observed petroleum contamination.

20.6 RECOMMENDATIONS

Surface water and sediment samples collected from NL-04 and NL-D-04 did not exceed any endpoint criteria. Because concentrations of GRO and benzene continue to exceed endpoint criteria in surface water protection well 14-113, it is recommended that monitoring at immediately downgradient location NL-04 continue. However, because surface water and sediment have not exceeded GRO or BTEX endpoint criteria for four consecutive sampling events, it is recommended that sampling at NL-D-04 be discontinued.

GRO, BTEX, TAH, and TAqH concentrations in groundwater collected from monitored wells at this site remain above their respective endpoint criteria. However, evidence that natural attenuation is progressing is evidence by the change in the GRO trend in downgradient well 14-113 from stable in 2011 to decreasing in 2012. Additional evidence includes the change in the ethylbenzene trend in plume well TFB-MW4B from increasing in 2011 to stable in 2012. Because of this, it is recommended that all monitoring at this site continue every odd year with the next monitoring in 2013 to allow attenuation to effect a change. This is consistent with the CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling.

Legend

- 25 — Ground elevation contour (feet above MLLW)
- Avgas pipelines (inactive)
- Shoreline inspection performed
- 14-113 — Sample collected in 2012
- 2012 Monitoring well
- 2012 Surface water/ sediment sample
- Valve pit
- Approximate groundwater flow direction

Notes:

1. Concentrations in micrograms per liter (µg/L).
2. Only values in exceedance of endpoint criteria shown.

Endpoint Criteria	
Groundwater	
GRO	1,300 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

50 0 50 100
SCALE IN FEET

Unnamed Creek

North Seeper Creek

NL-D-04

NL-04

Well 14-210	
GRO	2,400

14-210

14-113

Well 14-113	
GRO	2,000 Y
Benzene	6.9 J
TAH	704 DJ
TAqH	704 DJ

TFB-MW4B

Well TFB-MW4B	
GRO	36,000 DY
Benzene	24 D
Toluene	4,800 DJ
Ethylbenzene	2,100 D
Xylenes	15,600 D

50 25 75

Path: F:\Adak CAD\Adak GIS Files\Adak GW GIS Data\2012_GW_MAPS\Fig_20_1_TankFarm.mxd

Date Modified: 02/18/13 MI

U.S. NAVY	SEALASKA	**Figure 20-1** **SWMU 61, Tank Farm B** **Sample Locations**	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

21. 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 2012. The remedy specified for this site in the OU A ROD is free product recovery (Navy et al. 2000). Additional post free product recovery and MNA remedy are specified in the Final Decision Document for SWMU 62, New Housing Fuel Leak (Navy 2006b). 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.

21.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at 47 monitoring wells at Sandy Cove on September 8, 2012 and at Eagle Bay on September 10, 2012. Seventeen of the wells are located in the Sandy Cove Housing 102, 107, and 146 Areas, and 30 wells are located in the Eagle Bay Housing Complex. Table 21-1 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). Figures 21-1 and 21-2 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 direcrtion.

The 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. Well MRP-MW3 is located in a localized shallow perched aquifer within the western diesel and gasoline plume.

Table 21-1. 2012 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	19.48	5.65	0	6.14	0.410	0.0	0.00	6.45	0.0	6
03-155	26.27	18.93	7.34	0	5.97	0.253	1	1.61	6.65	0.0	15
03-619	23.35	16.34	7.01	0	6.30	0.606	0	0.28	6.67	0.0	95
03-778	25.30	19.53	5.77	0	6.36	0.437	9.6	0.00	5.58	0.0	-44
03-802	23.17	16.60	6.57	0	5.81	0.168	24	5.89	5.68	0.0	116
03-895	26.21	21.54	4.67	0	5.28	0.146	7.6	5.81	4.50	0.0	311
HMW-102-1	25.29	19.38	5.91	0	NP	NP	NP	NP	NP	NP	NP
HMW-146-1	23.52	16.64	6.88	0	NP	NP	NP	NP	NP	NP	NP
HMW-146-3	23.41	16.25	7.16	0	6.24	0.352	9	0.00	6.11	0.0	-46
MRP-MW2	26.99	21.38	5.61	0	6.10	0.462	9.4	0.00	6.80	0.0	-24
MRP-MW3	27.25	7.67	19.58	0	6.17	0.313	0.0	0.00	8.47	0.0	-22
MW-107-1	25.65	18.22	7.43	0	6.13	0.409	8	0.00	6.15	0.0	-29
MW-134-10	24.82	17.31	7.51	0	NP	NP	NP	NP	NP	NP	NP
MW-134-11	26.53	18.01	8.52	0	6.39	0.927	7	0.61	7.18	0.0	-80
MW-146-1	24.42	17.12	7.30	0	5.99	0.416	0.0	0.00	7.64	0.0	13
MW-187-1	26.86	19.05	7.81	0	6.29	0.532	7	0.00	6.61	0.0	-50
RW-102-4	25.28	19.14	6.14	0	NP	NP	NP	NP	NP	NP	NP
Eagle Bay Housing Complex											
03-101	26.01	22.58	3.43	0	NP	NP	NP	NP	NP	NP	NP
03-102	17.27	14.22	3.05	0	NP	NP	NP	NP	NP	NP	NP
03-103	18.93	16.05	2.88	0	5.87	0.177	5	5.02	5.78	0.0	209
03-107	31.30	27.46	3.84	0	NP	NP	NP	NP	NP	NP	NP
03-109	33.69	30.07	3.62	0	6.15	0.277	7	9.30	5.74	0.0	199
03-502	28.04	24.00	4.04	0	6.04	0.281	0.0	0.00	6.19	0.0	51
03-518	31.04	27.18	3.86	0	NP	NP	NP	NP	NP	NP	NP
03-898	14.83	13.02	1.81	0	5.97	0.187	0.0	2.07	6.90	0.0	172

Table 21-1. 2012 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											
AMW-704	8.21	7.09	1.12	0	5.90	0.213	15	1.40	8.15	0.0	96
CTO-124-MW14	13.74	11.03	2.71	0	NP	NP	NP	NP	NP	NP	NP
CTO-124-MW15	20.96	17.82	3.14	0	NP	NP	NP	NP	NP	NP	NP
HMW-303-1	30.78	27.11	3.67	0	NP	NP	NP	NP	NP	NP	NP
HMW-303-2	30.55	26.93	3.62	0	NP	NP	NP	NP	NP	NP	NP
HMW-303-3	31.64	27.85	3.79	0	NP	NP	NP	NP	NP	NP	NP
HMW-303-4	30.20	26.16	4.04	0	NP	NP	NP	NP	NP	NP	NP
HMW-303-9	29.54	26.35	3.19	0	NP	NP	NP	NP	NP	NP	NP
HMW-303-10	9.78	6.49	3.29	0	NP	NP	NP	NP	NP	NP	NP
HMW-303-11	30.35	26.70	3.65	0	NP	NP	NP	NP	NP	NP	NP
MW-303-7	26.78	21.72	5.06	0	6.10	0.428	5.1	0.00	7.13	0.0	-29
MW-303-8	27.39	22.82	4.57	0	NP	NP	NP	NP	NP	NP	NP
MW-303-12	25.80	21.45	4.35	0	NP	NP	NP	NP	NP	NP	NP
MW-303-14	28.10	22.48	5.62	0	NP	NP	NP	NP	NP	NP	NP
RW-303-4	27.89	22.15	5.74	0	NP	NP	NP	NP	NP	NP	NP
RW-303-6	29.09	23.53	5.56	0	NP	NP	NP	NP	NP	NP	NP
RW-303-7	26.61	22.62	3.99	0	NP	NP	NP	NP	NP	NP	NP
RW-303-9	28.34	24.71	3.63	0	NP	NP	NP	NP	NP	NP	NP
RW-303-13	8.98	6.88	2.10	0	6.03	0.185	0	4.07	9.72	0.0	183
RW-303-14	10.53	7.96	2.57	0	5.96	0.165	9.9	0.48	7.44	0.0	61
RW-303-15	31.26	27.67	3.59	0	NP	NP	NP	NP	NP	NP	NP
RW-303-16	11.02	7.94	3.08	0	5.98	0.203	0.0	0.00	7.12	0.0	9
Surface Water											
NL-09	NA	NA	NA	NA	6.21	0.519	7	8.11	9.81	0.0	35

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.

Twenty-two wells were sampled for petroleum contaminants between September 7 and 11, 2012. Surface water protection monitoring was performed at six well locations in Eagle Bay: 03-109, 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/sediment sample (NL-09) was collected in East Canal on September 11, 2012 downgradient of the free product recovery trench and booms. Field measurements were recorded on the field forms and logbooks during monitoring well sampling activities (Appendix A). Table 21-1 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 six wells (03-155, 03-502, 03-802, MW-134-11, MW-187-1, MRP-MW2, and RW-303-14) did not stabilize and were sampled after three well volumes were removed. The 2012 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 not detected in any well in 2012. Monthly free product recovery activities were performed in the Eagle Bay Housing area at this site during October 2011 through September 2012. A total of 6.21 gallons of free product was recovered from the site during this time frame. Additionally, oil-adsorbent 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. Monthly free product recovery activities for this site are summarized in Appendix J and the Remedial Action Summary Report, Free Product Recovery, Adak (Navy 2012f).

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. Results of the visual shoreline inspections are summarized in Section 4.1.3.

21.2 TARGET ANALYTE RESULTS

All 13 groundwater samples collected from Sandy Cove wells were analyzed for DRO. Five of these samples were also analyzed for GRO and BTEX. One sample, collected from MW-187-1 was also analyzed for benzene. All nine groundwater samples collected from Eagle Bay

wells were analyzed for DRO. One of these samples was also analyzed for GRO and BTEX. Tables 21-2 and 21-3 present the analytical results for Sandy Cove and Eagle Bay Housing Areas, respectively. Figures 21-1 and 21-2 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. Laboratory reports presenting the 2012 results are provided in Appendix F.

21.2.1 Sandy Cove Housing

Eight of the 13 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 1,600 µg/L (plume edge well 03-778) to 7,700 µg/L (plume well MW146-1).

GRO was detected above the endpoint criteria (1,300 µg/L) in two Sandy Cove Housing wells (MRP-MW2 and MRP-MW3) at concentrations of 2,900 µg/L and 31,000 µg/L, respectively. Benzene was detected above the endpoint criteria (5 µg/L) in one well, MRP-MW2, at a concentration of 35 µg/L. Toluene did not exceed the endpoint criteria (1,000 µg/L) at any of the wells sampled. Ethylbenzene (1,900 µg/L) and total xylenes (11,400 µg/L) were detected above their respective endpoint criteria of 700 µg/L and 10,000 µg/L and in well MRP-MW3.

21.2.2 Eagle Bay Housing

Two of the nine wells sampled (MW-303-7 and RW 303-16) had DRO concentrations above the endpoint criteria (1,500 µg/L) at 14,000 µg/L and 2,700 µg/L, respectively. DRO did not exceed endpoint criteria in wells 03-103, 03-109, 03-502, 03-898, AMW-704, RW-303-13, and RW-303-14. GRO exceeded the endpoint criteria (1,300 µg/L) at well 03-502, at 3,400 µg/L. DRO and BTEX did not exceed their respective endpoint criteria in this well.

The surface water and sediment samples collected at location NL-09, located downgradient of the recovery trench boom in East Canal, were 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 and sediment analytical results were compared to the South of Runway 18-36 endpoint criteria and State of Alaska surface water criteria. Tables 21-4 and 21-5 present the surface water and sediment analytical results, respectively.

Table 21-2. 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
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
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
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
03-802	2006	53 U	25 U	1.0 U	1.0 U	1.0 U	3.0 U
Downgradient	2007	48 U	19 J	0.50 U	0.12 J	0.50 U	1.0 U
	2008	99 U	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2009	28 J	100 U	0.040 J	0.50 U	0.080 J	0.42 J
	2010	49 U	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2011	21 J	100 U	NP	NP	NP	NP
	2012	54 U	NP	NP	NP	NP	NP
03-895	2006	51 U	25 U	1.0 U	1.0 U	1.0 U	3.0 U
Downgradient	2007	50 U	100 U	0.50 U	0.16 J	0.50 U	1.0 U
	2008	22 J	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2009	49 U	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2010	49 U	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2011	49 U	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2012	15 J	100 U	0.50 U	0.50 U	0.50 U	1.0 U
Endpoint Criteria		1,500	1,300	5	1,000	700	10,000

Table 21-2. 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)
HMW-146-3	2006	**1,900**	26	1.0 U	1.0 U	1.0 U	3.0 U
Downgradient	2007	1,200 Y	36 J	0.50 U	0.14 J	0.50 U	1.25 J
Plume Edge	2008	1,100 Y	32 J	0.080 J	0.59 U	0.50 U	1.20 J
	2009	1,300 Y	32 J	0.060 J	0.50 U	0.50 U	0.90 J
	2010	**1,700 Y**	23 J	0.50 U	0.64 U	0.50 U	0.84 J
	2011	1,300 Y	42 J	0.060 J	0.50 U	0.50 U	1.21 J
	2012	1,300 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
MRP-MW3	2006	**1,800**	**38,000**	2.4 J	730	**2,500**	**13,100**
Plume Area	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**
MW-107-1	2006	**3,400**	520	0.88 J	2.2	12	48
Plume Area	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
MW-134-11	2001	**7,450**	214	3.56	1.24	14.3	34.1
Plume Area	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
Endpoint Criteria		1,500	1,300	5	1,000	700	10,000

Table 21-2. 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)
MW-146-1	2007	**12,000 Y**	220 H	0.14 J	0.61	3.7	35
Plume Area	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
MW-187-1	2006	**3,900**	820	**18**	1.0 U	83	66.6
Plume Area	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
Endpoint Criteria		1,500	1,300	5	1,000	700	10,000

Notes:
Bold indicates reported concentration is greater than the endpoint criteria based on ADEC cleanup levels for groundwater used as a drinking water source.

Table 21-3. 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)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
03-103	2006	**1,900**	47	1.0 U	1.0 U	1.0 U	8.7
Downgradient	2007	230 Y	15 J	0.50 U	0.50 U	0.50 U	1.5
	2008	540 Y	22 J	0.50 UJ	0.50 UJ	0.50 UJ	2.1 J
	2009	190 Y	100 U	0.50 U	0.50 U	0.50 U	0.22 J
	2010	890 Y	100 U	0.50 U	0.50 U	0.50 U	0.64
	2011	400 Y	100 U	0.50 U	0.50 U	0.50 U	0.24 J
	2012	120 Y	NP	NP	NP	NP	NP
03-109	2006	50 U	25 U	1.0 U	1.0 U	1.0 U	3.0 U
Cross-Gradient	2007	48 U	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2008	15 J	100 U	0.50 UJ	0.50 UJ	0.50 UJ	1.0 UJ
	2009	93 U	100 U	0.50 U	0.66 U	0.50 U	1.0 U
	2010	54 U	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2011	17 J	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2012	17 J	NP	NP	NP	NP	NP
03-502	2006	**8,200**	**8,200**	**5.4**	730	320	900
Plume Area	2007	**6,400 Z**	**6,700 DY**	1.8	230 D	170 D	510 D
	2008	**4,800 Z**	**5,300 Y**	1.5	180 D	180 D	520 D
	2009	1,300 Y	**3,600 Y**	0.64	13	140 D	430 D
	2010	1,200 Y	**1,500 Y**	0.15	1.5	80 D	142
	2011	1,400 Y	**3,200 Y**	0.21 J	12	110 D	430 D
	2012	1,300 L	**3,400 Y**	1.0 U	5.4 D	66 D	315 D
03-898	2006	660	25 U	1.0 U	1.0 U	1.0 U	3.0 U
Downgradient	2007	150 Y	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2008	79 J	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2009	80 U	100 U	0.50 U	0.50 U	0.50 U	1.0 U
	2010	1,200 Y	14 J	0.12 J	0.65 U	0.50 U	1.0 U
	2011	1,100 Y	18 J	0.55	0.50 U	0.060 J	1.0 U
	2012	110 Y	NP	NP	NP	NP	NP

Table 21-3. Analytical Results for Petroleum-Related Chemicals at SWMU 62, New Housing Fuel Leak – Eagle Bay Housing (continued)

Well Location	Year	DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
AMW-704	2006	**2,500**	49	1.0 U	1.0 U	0.63 J	2.4
Plume Area	2007	**1,600 Y**	85 J	0.50 U	0.13 J	0.84	5.16
	2008	**2,700 Y**	95 J	0.070 J	0.50 U	0.82	6.27
	2009	1,200 Y	61 J	0.050 J	0.50 U	0.18	2.19 J
	2010	**3,800 Y**	78 J	0.12 J	0.50 U	1.7	7.78
	2011	**3,700 Y**	77 J	0.12 J	0.50 U	0.70	5.29 J
	2012	820 Y	NP	NP	NP	NP	NP
MW-303-7 -Plume Area	2011	**21,000 DY**	770 H	0.28 J	1.4	36	136
	2012	**14,000 Y**	NP	NP	NP	NP	NP
RW-303-13	2006	**3,400**	94	1.0 U	1.0 U	0.94 J	11
Plume Area	2007	NP	NP	NP	NP	NP	NP
	2008	**1,800 Y**	35 J	0.50 U	0.50 U	0.41 J	4.04 J
	2009	200 Y	22 J	0.50 U	0.50 U	0.50 U	1.0 U
	2010	**2,100 Y**	15 J	0.50 U	0.54 U	0.25 J	1.98 J
	2011	**2,300 Y**	25 J	0.50 U	0.50 U	0.46 J	3.69 J
	2012	56 Y	NP	NP	NP	NP	NP
RW-303-14	2006	660	35	1.0 U	1.0 U	0.74 J	1.65 J
Cross-gradient	2007	670 Y	29 J	0.50 U	0.50 U	0.50 U	1.0
	2008	440 Y	22 J	0.50 UJ	0.50 UJ	0.090 J	0.52 J
	2009	270 Y	19 J	0.50 U	0.50 U	0.50 U	0.28 J
	2010	270 Y	14 J	0.50 U	0.62 U	0.50 U	1.0 U
	2011	530 Y	18 J	0.50 U	0.50 U	0.50 U	1.0 U
	2012	570 Y	NP	NP	NP	NP	NP
RW-303-16	2006	**10,000 J**	92	1.0 U	1.0 U	3.4	2.4
Plume Area	2007	**2,500 Y**	120 H	0.50 U	0.50 U	0.52	1.34 J
	2008	**6,300 Y**	120 H	0.16 J	0.50 U	1.1	2.85 J
	2009	**2,900 Y**	92 J	0.10 J	0.50 U	1.4	2.8
	2010	**8,600 Y**	110 H	0.11 J	0.50 U	1.3	3.03
	2011	**6,100 Y**	110 H	0.090 J	0.13 J	0.89	3.02
	2012	**2,700 Y**	NP	NP	NP	NP	NP
Endpoint Criteria		1,500	1,300	5	1,000	700	10,000

Note:
Bold indicates reported concentration is greater than ADEC cleanup levels for groundwater used as a drinking water source.

Concentrations of GRO (150 µg/L), TAH (21.3 µg/L) and TAqH (21.5 µg/L) were detected in the surface water sample collected at location NL-09 above endpoint criteria of 114 µg/L, 10 µg/L, and 15 µg/L, respectively. DRO was detected at location NL-09 below endpoint criteria of 250 µg /L at a concentration of 110 µg /L. Indeno(1,2,3-cd)pyrene was not detected in the surface water sample.

DRO was detected in sediment sample NL-09 at 69 mg/kg, which is below the endpoint criteria of 90.6 mg/kg. GRO, BTEX, and target PAHs were not detected in this sample above their respective method detection limits.

Table 21-4. 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	**29.0**	**29.2 J**
	2011	**1,500 Y**	**260 Y**	0.021 U	**36.0**	**36.7 J**
	2012	110 Y	**150 Y**	0.020 U	**21.3**	**21.5 J**
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 reporting 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 reporting 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 21-5. 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
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.

21.3 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 21-1, which were collected during the 2012 LTM event support the evidence of continued natural attenuation as shown by the reducing environment (negative ORP) and dissolved oxygen concentrations frequently depleted within contaminant plumes (less than 2.0 mg/L). A more in-depth discussion of natural attenuation is presented in Section 4.1.2.

21.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012e). Trend evaluation is conducted for only analytes that exceeded the endpoint criteria within the last two sampling events and had a

minimum of four data points. Results of Mann-Kendall and Sen's trend evaluations are summarized in Table 21-6. 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-107-1, 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 a stable concentration.
- Well 03-155: DRO exhibits an increasing trend at the 80 percent confidence interval. No trend is exhibited at the 95 percent confidence interval.
- Well MRP-MW2: DRO, GRO, and benzene all exhibit no trend at either the 80 or 95 percent confidence interval. The coefficients of variation indicate 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.
- Well MW-187-1: DRO is decreasing at the 80 percent confidence interval, however the Sen's evaluation of the trend is not statistically significant.

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 -1,000.
- Wells AMW-704, RW-303-13, and RW-303-16: DRO exhibits no trend at either the 80 or 95 percent confidence interval. The coefficients of variation indicate stable concentrations.

21.5 CONCLUSIONS

This section presents the conclusions based on a review of groundwater monitoring conducted at the SWMU 62, New Housing Fuel Leak site in 2012. The conclusions are as follows:

- Groundwater Flow: The 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 beneath Eagle Bay, toward East Canal.

Table 21-6. Concentration Trend Evaluation for SWMU 62, New Housing Fuel Leak

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)	Mann-Kendall Trend			Sen's Slope			
							Trend at 80% C.I.	Trend at 95% C.I	Concentration Stability[2]	Median Slope	Statistically Significant Trend	2-Tailed Test at 80% C.I. Lower Limit	2-Tailed Test at 80% C.I. Upper Limit
Sandy Cove Housing													
03-104	DRO	Yes	9,600 Y	1,500	6	1	No trend	No trend	Stable	NC	NC	NC	NC
03-155	DRO	Yes	3,100 Y	1,500	9	15	Increasing	No Trend	NA	NC	NC	NC	NC
03-778	DRO	Yes	1,600 Y	1,500	7	-2	No trend	No trend	Stable	NC	NC	NC	NC
MRP-MW2	DRO	No	1,600 L	1,500	6	5	No trend	No trend	Stable	NC	NC	NC	NC
	GRO	Yes	4,800 Y	1,300	6	-3	No trend	No trend	Stable	NC	NC	NC	NC
	Benzene	Yes	35 J	5	6	-5	No trend	No trend	Stable	NC	NC	NC	NC
MRP-MW3	DRO	Yes	2,600 L	1,500	5	-2	No trend	No trend	Stable	NC	NC	NC	NC
	GRO	Yes	34,000 DY	1,300	5	-5	No trend	No trend	Stable	NC	NC	NC	NC
	Ethylbenzene	Yes	1,900 DJ	700	5	-3	No trend	No trend	Stable	NC	NC	NC	NC
	Xylenes	Yes	11,400 DJ	10,000	5	-1	No trend	No trend	Stable	NC	NC	NC	NC
MW-107-1	DRO	Yes	3,600 Y	1,500	7	-2	No trend	No trend	Stable	NC	NC	NC	NC
MW-134-11	DRO	Yes	7,100 Y	1,500	9	-3	No trend	No trend	Stable	NC	NC	NC	NC
MW-146-1	DRO	Yes	11,000 Y	1,500	6	-4	No trend	No trend	Stable	NC	NC	NC	NC
MW-187-1	DRO	Yes	2,400 Y	1,500	7	-10	Decreasing	No trend	NA	-225	No	-450	0
Eagle Bay Housing													
03-502	GRO	Yes	3,400 Y	1,300	7	-15	Decreasing	Decreasing	NA	-1,000	Yes	-1,550	-475
AMW-704	DRO	No	3,700 Y	1,500	7	-1	No trend	No trend	Stable	NC	NC	NC	NC
RW-303-13	DRO	No	2,300 Y	1,500	6	-5	No trend	No trend	Stable	NC	NC	NC	NC
RW-303-16	DRO	Yes	6,100 Y	1,500	7	-5	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.

- MNA: The groundwater parameters obtained during the 2012 LTM event provide evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- No free product was observed in any well during 2012 LTM activities.
- **Sandy Cove Housing 102, 107, and 146 Areas:** Three areas of contamination that exceeded endpoint criteria persist in the Sandy Cove Housing Area in 2012: an area of diesel contamination on the southern side of the residential area encompassing wells 03-155, MW-134-11, and MW-187-1; an area of diesel 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 diesel and gasoline constituents west of Main Road, upgradient of the airport terminal, encompassing wells MRP-MW-2, MRP-MW3, 03-104, and 03-778 (Figure 21-1). All areas of contamination appear to have not changed in size since 2011. 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). GRO and BTEX have remained below endpoint criteria for six sampling events. This well is located in the western-most plume
    - Well 03-155: DRO was detected above the endpoint criteria in 2012 for the sixth consecutive sampling event and shows an increasing trend in concentration at the 80 percent confidence interval. This well is located in the southern-most plume.
    - Well 03-619: DRO has remained below the endpoint criteria for six sampling events. This well is downgradient of the southern diesel contaminant plume.
    - Well 03-778: DRO was detected above the endpoint criteria in 2012. Statistical analysis shows the concentration is stable. GRO and BTEX have remained below endpoint criteria for seven sampling events. This well is located on the northern upgradient edge of the western-most plume.
    - Well 03-802: DRO has not been detected above the endpoint criteria for the last seven sampling events. This well is located downgradient of the central diesel plume and upgradient of the western diesel and gasoline plume.
    - Well 03-895: None of the analytes were detected above the endpoint criteria in the last seven sampling events (2006 through 2012). This well is downgradient of the western diesel and gasoline plume and shows that the contamination plume has not migrated to this location.

- Well HMW-146-3: DRO has remained below the endpoint criteria since 2010 (two consecutive sampling events). This well is at located cross-gradient to the central diesel plume.
- Well MRP-MW2: Concentrations of GRO and benzene exceeded endpoint criteria in this well in 2012 for the fourth consecutive sampling event. Statistical analysis shows that concentrations of both contaminants are stable. DRO was detected below the endpoint criteria and statistical analysis shows that the concentration is stable. TEX compounds have not exceeded endpoint criteria since 2006 (six consecutive sampling events). This well is located within the western diesel and gasoline plume.
- Well MRP-MW3: Concentrations of DRO, GRO, ethylbenzene, and total xylenes exceeded endpoint criteria in this well in 2012. Benzene and toluene were below the endpoint criteria. Statistical analysis shows that the concentrations of all compounds in this well are stable. This well is located in a localized shallow perched aquifer within the western diesel and gasoline plume.
- Well MW-107-1: DRO has been detected above the endpoint criteria from 2006 through 2012 and exhibits a stable concentration at the 95 percent confidence interval. This well is located within the central diesel contaminant plume.
- Well MW-134-11: DRO has been detected above the endpoint criteria in this well from 2005 through 2012. This well exhibits a stable concentration at the 95 percent confidence interval. This well is located within the southern-most contaminant plume.
- Well MW146-1: DRO has been detected above the endpoint criteria since 2007 and exhibits a stable concentration at the 80 and 95 percent confidence intervals. This well is located within the central diesel contaminant plume.
- Well MW187-1: DRO has been detected above the endpoint criteria since 2006 and exhibits a statistically stable concentration. Benzene has been detected below endpoint criteria since 2010 (three consecutive sampling events). This well is located in the southern diesel contaminant plume.

- **Eagle Bay Housing:** Two main areas of groundwater contamination were observed at the Eagle Bay Housing Area in 2012. These areas were determined from 2012 LTM results and free product recovery activities performed between October 2011 and September 2012 (Appendix L). One area is associated with the East Canal shoreline petroleum seep that is located downgradient of the product recovery trench.

The area is located on the northwestern portion of the site encompassing the monitoring locations (counter-clockwise on Figure 21-2) 03-502, 03-101, CTO124-MW15, 03-102, RW-303-13, AMW-704, NL-09, HMW-303-09, RW-303-15, and HMW-303-11. This groundwater contamination plume contains both dissolved-phase diesel and gasoline components and floating free product and remains mostly unchanged from 2011 observations.

The second area is located on the southeastern portion of the site crossing Main Road and encompasses wells MW-303-07, MW-303-12, 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 changed in area compared to 2011 observations. Conclusions for individual wells that are monitored are presented below:

- Well 03-103: DRO has remained below the endpoint criteria since 2007 (six consecutive sampling events). This well is cross-gradient to the southern edge of the northwestern contaminant plume.
- Well 03-109: DRO has remained below the endpoint criteria since 2007 (seven consecutive sampling events). This well is cross-gradient to the southern edge of the plume.
- Well 03-502: GRO concentrations exceeded the endpoint criteria for the seventh consecutive sampling event. GRO exhibits a statistically significant decreasing concentration at the 80 and 95 percent confidence intervals. BTEX has remained below endpoint criteria for six consecutive sampling events. DRO remained below the endpoint criteria for the fourth time since 2006. This well is located cross-gradient to the northern edge of the northwestern diesel and gasoline plume.
- Well 03-898: DRO has remained below the endpoint criteria since 2006 (seven consecutive sampling events). This well is south of the recovery trench and cross-gradient to the northwestern plume.
- Well AMW-704: The DRO concentration dropped below endpoint criteria in 2012 and exhibits a stable concentration at the 80 and 95 percent confidence intervals. This well is downgradient and adjacent to East Canal and is located within the northwestern source plume.

- Well MW-303-7: This well was added to the monitoring program in 2011. DRO was again detected above the endpoint criteria in 2012. This well is east of the Main Road in the southeastern plume area.
- Well RW-303-13: DRO was detected below the endpoint criteria for the first time since 2010 and it exhibits a stable concentration at the 80 and 95 percent confidence intervals. This well is located upgradient and adjacent to the free product recovery trench and within the northwestern plume.
- Well RW-303-14: DRO has remained below the endpoint criteria since 2006 (seven consecutive sampling events). This well is located upgradient of the recovery trench and cross-gradient north of the northwestern contaminant plume.
- Well RW-303-16: The DRO concentration has remained above the endpoint criteria for the last seven sampling events 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 adsorbent 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.
- A surface water and sediment sample (NL-09) 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 GRO, TAH, and TAqH. The sediment sample did not exceed any endpoint criteria.

21.6 RECOMMENDATIONS

Sandy Cove Housing Area

The areas of groundwater contamination in Sandy Cove Housing appeared to be stable or somewhat diminishing in size. This is confirmed by stable or decreasing contaminant concentrations trends in 13 of the 14 wells analyzed. Wells 03-104 and 03-778 have had GRO and BTEX concentrations below endpoint criteria for at least six years. Well MW-187-1 has shown benzene concentrations below endpoint criteria for three consecutive sampling periods. Based on these observations, it is recommended that GRO and BTEX sampling be discontinued in wells 03-104 and 03-778 and that benzene sampling be discontinued in well 187-1. However, sampling for DRO in these wells should continue.

Well 03-895, which is located downgradient of the western gasoline-diesel plume, has exhibited DRO, GRO, and BTEX concentrations below endpoint criteria for seven consecutive sampling periods. All the wells within the western plume exhibit contaminant concentrations that are stable. Based on these results, it is recommended that monitoring at well 03-885 be discontinued.

Wells 03-802, HMW-102-1, and HMW-146-3 are located outside of the plume areas. Because contaminant concentrations are stable across the site and because these wells are located upgradient, cross-gradient, or far enough downgradient of the plumes, it is recommended that monitoring at these locations be discontinued.

Finally, because of the stable contaminant concentrations at this site, it is recommended that all other monitoring at Sandy Cove Housing Area be reduced to every odd year with the next monitoring to occur in 2013. This is consistent with the CMP, Revision 5 (Navy 2012e) to align all biennial sampling to odd year sampling.

Eagle Bay Housing Area

Areas of groundwater contamination at Eagle Bay Housing Area appear to be stable or somewhat decreasing in concentrations. The area encompassed by the northwestern plume remained mostly unchanged from last year but no longer encompasses well 03-518. The southeastern diesel plume appears also appears to remain unchanged compared to 2011. Additionally, gasoline constituents have shown statistically significant decreasing concentrations in this plume, and DRO concentrations have remained stable across the site.

DRO concentrations in wells 03-103, 03-109, 03-898, and RW-303-14 have remained below endpoint criteria for at least six consecutive sampling events. These wells are located outside of the plume areas. Because of this and because DRO concentrations are stable in groundwater, it is recommended that sampling at these location be discontinued, but that monitoring for free product continue.

Additionally, DRO and BTEX have not been detected above endpoint criteria in well 03-502 since 2008 (four consecutive sampling events). It is therefore recommended that sampling for these compounds be discontinued in this well.

Several wells monitored for free product are located upgradient or cross-gradient of the two plumes which include wells (from north to south) 03-107, 03-518, RW-303-12, HMW-303-1, HMW-303-9, CTO124-MW14, RW-303-9, HMW-303-2, HMW-303-10, RW-303-7, RW-303-06, and MW-303-14 . Periodic free product recovery was performed at

wells 03-518, HMW-303-3, HMW-303-09, and RW-303-7 from October 2011 to September 2012 but no measurable free product was observed in these wells during this period. Monthly free product recovery has occurred at the other wells in past years but was discontinued due to the lack of observed free product in the wells. Because of this and the stable and decreasing concentrations of contaminants at the site, it is recommended that monitoring be discontinued at these wells.

Because natural attenuation is progressing at this site and because past monitoring have shown incremental changes to the site, it is recommended that all monitoring at this site be reduced to every odd year with the next monitoring to occur in 2013.

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.

Legend

- 25 — Ground elevation contour (feet above MLLW)
- Estimated extent of endpoint criteria exceedance
- 03-104 — Sample collected in 2012
- 2012 Monitoring well
- Well not monitored in 2012
- General groundwater flow direction

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	1,300 µg/L
Benzene	5 µg/L
Ethylbenzene	700 µg/L
Total Xylenes	10,000 µg/L

0 250 500

SCALE IN FEET

Well 03-778	
DRO	1,600 Y

Well 03-104	
DRO	4,900 Y

Well MRP-MW2	
GRO	2,900 Y
Benzene	35 J

Well MRP-MW3	
DRO	2,600 L
GRO	31,000 DY
Ethylbenzene	1,900 DJ
Total Xylenes	11,400 DJ

Well MW-107-1	
DRO	2,900 Y

Well MW-146-1	
DRO	7,700 Y

Well MW-187-1	
DRO	2,300 Y

Well MW-134-11	
DRO	7,100 Y

Well MW-03-155	
DRO	2,500 Y

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U.S. NAVY	SEALASKA	**Figure 21-1** **SWMU 62, New Housing Fuel Leak** **(Sandy Cove Housing)** **Sample Locations**	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

Legend

- 25 — Ground elevation contour (feet above MLLW)
- Estimated extent of endpoint criteria exceedance
- Product recovery trench
- Shoreline inspection performed
- Petroleum seep
- 03-502 — Sample collected in 2012
- 2012 Monitoring well
- Well not monitored in 2012
- 2012 Surface water sample
- General groundwater flow direction
- * — Product recovery conducted semi-monthly

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	1,300 µg/L
Surface Water	
GRO	114 µg/L
TAH	10 µg/L
TAqH	15 µg/L

50 0 50 100
SCALE IN FEET

Location NL-09	
GRO	150 Y
TAH	21.3
TAqH	21.5 J

Well 03-502	
GRO	3,400 Y

Well RW-303-16	
DRO	2,700 Y

Well MW-303-7	
DRO	14,000 D

Boom 2, Boom 8, Boom 3, East Canal, Main Road, 10, 42360, 42359, 42358, 42357, 42356, 42355, 42387, 42378, 42379, 42377, 42376, 423

03-502, 03-107, 03-518, 03-101*, HMW-303-11*, CTO124-MW15*, RW-303-12, HMW-303-5, RW-303-11, RW-303-14, RW-303-13, RW-303-15*, 03-102*, 03-103, HMW-303-12, AMW-704, MW-303-18, HMW-303-1, NL-09, MW-303-17, HMW-303-9, CTO124-MW14, RW-303-9, HMW-303-2, 03-898, MW-303-10, HMW-303-10, RW-303-7, HMW-303-4, MW-303-7, RW-303-6, MW-303-5, MW-303-1, RW-303-16, HMW-303-3*, RW-303-4*, MW-303-12*, MW-303-8, MW-303-14, 03-109

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U.S. NAVY	SEALASKA	**Figure 21-2** **SWMU 62, New Housing Fuel Leak** **(Eagle Bay Housing)** **Sample Locations**	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

22. TANKER SHED, UST 42494

This section presents the results of groundwater monitoring performed at the Tanker Shed, UST 42494 site during 2012. The remedy specified for this site in the OU A ROD is free product recovery (Navy et al. 2000). The Navy and ADEC have selected free product recovery and 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.

22.1 FIELD MEASUREMENTS

Depth-to-water and product thickness measurements were collected at 21 monitoring wells on August 31, 2012. Table 22-1 provides the measured depths to water (corrected for product thickness, if present), 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 thicknesses (Appendix D). Figure 22-1 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.

Four groundwater samples were collected on September 7, 2012. 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 22-1 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 (except at well 04-601) stabilized to within specified criteria.

Table 22-1. 2012 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	6.96	4.38	0	6.17	0.326	91.8	0.00	8.94	0.0	-37
04-176	11.33	7.11	4.22	0	NP	NP	NP	NP	NP	NP	NP
04-178	11.32	7.02	4.30	0	NP	NP	NP	NP	NP	NP	NP
04-290	11.19	7.41	3.78	0	6.21	0.286	98.5	0.00	8.36	0.0	-9
04-301	11.35	7.06	4.29	Trace	NP	NP	NP	NP	NP	NP	NP
04-302	11.13	7.82	3.31	0	NP	NP	NP	NP	NP	NP	NP
04-303	11.13	6.83	4.30	0	NP	NP	NP	NP	NP	NP	NP
04-304	11.20	7.03	4.17	0	NP	NP	NP	NP	NP	NP	NP
04-306	11.17	7.31	3.86	0	5.99	0.315	85.0	0.00	8.64	0.0	-6
04-307	11.38	7.21	4.17	0	NP	NP	NP	NP	NP	NP	NP
04-308	11.47	7.25	4.22	0	NP	NP	NP	NP	NP	NP	NP
04-309	11.00	6.92	4.08	0	NP	NP	NP	NP	NP	NP	NP
04-310	11.18	7.02	4.16	0	NP	NP	NP	NP	NP	NP	NP
04-311	10.93	6.64	4.29	0	NP	NP	NP	NP	NP	NP	NP
04-312	11.21	6.93	4. 28	0	NP	NP	NP	NP	NP	NP	NP
04-313	11.35	6.97	4.38	0	NP	NP	NP	NP	NP	NP	NP
04-314	11.22	6.94	4.28	0	NP	NP	NP	NP	NP	NP	NP
04-317	11.20	7.20	4.00	0	NP	NP	NP	NP	NP	NP	NP
04-601	13.72	10.95	2.77	0	6.10	0.225	110.0	11.03	7.32	0.0	106
TS-03	9.61	6.67	2.94	0	NP	NP	NP	NP	NP	NP	NP
TS-04	10.41	7.11	3.30	0	NP	NP	NP	NP	NP	NP	NP

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.

The required three casing volumes were removed from well 04-601 prior to sampling per the CMP Revision 5 (Navy 2012e). The 2012 analytical results in this well are consistent with past analytical results and appear to be unaffected by the lack of stabilization. Trace levels of free product was detected in one well, 04-301, during the 2012 annual LTM field event.

22.2 TARGET ANALYTE RESULTS

The groundwater samples collected from wells 04-290, 04-306, and 04-601 were analyzed for DRO and GRO. Samples collected from well 04-175 was analyzed for DRO only. Table 22-2 presents the analytical results. Figure 22-1 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. Laboratory reports presenting the 2012 results are provided in Appendix F.

Groundwater collected from wells 04-175 (5,500 µg/L), 04-290 (5,600 µg/L), and 04-306 (4,700 µg/L) contained DRO exceeding the endpoint criteria of 1,500 µg/L. DRO in downgradient well 04-601 was below the endpoint criteria. Groundwater collected from wells 04-290, 04-306, and 04-601 was below endpoint criteria for GRO (1,300 µg/L).

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 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, which were collected during the 2012 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.

22.4 TREND EVALUATION

Statistical trend evaluations were conducted for target analyte concentrations in groundwater in accordance with the CMP, Revision 5 (Navy 2012e). Trend evaluation is conducted for only 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 22-3. Worksheets and graphs are provided in Appendix H.

Table 22-2. Analytical Results for Petroleum-Related Chemicals for Tanker Shed, UST 42494

Well Location	Year	DRO (µg/L)	GRO (µg/L)
04-175 Plume Area	2001	**16,900**	316
	2002	NP	NP
	2003	NP	NP
	2004	NP	NP
	2005	**7,080 J**	313
	2006	**11,000**	480
	2007	**6,600 Y**	380 Z
	2008	**4,700 Y**	440 Y
	2009	**7,700 Y**	NP
	2010	**6,100 Y**	NP
	2011	**5,600 Y**	NP
	2012	**5,500 Y**	NP
04-290 Plume Area	2001	**9,220**	**3,190**
	2002	NP	NP
	2003	NP	NP
	2004	NP	NP
	2005	**2,890 J**	541
	2006	**9,000**	1,300
	2007	1,000 Y	72 J
	2008	**2,600 Y**	370 Y
	2009	**4,300 Y**	1,100 Y
	2010	**4,300 Y**	820 JH
	2011	**5,900 Y**	990 H
	2012	**5,600 Y**	490 Y
04-306 Plume Area	2001	NP	NP
	2002	NP	NP
	2003	NP	NP
	2004	NP	NP
	2005	**2,500 J**	**1,460**
	2006	**FP**	**FP**
	2007	**FP**	**FP**
	2008	**5,200 Y**	**1,800 Y**
	2009	**4,400 Y**	**1,700 Y**
	2010	**4,300 Y**	**1,500 Y**
	2011	**7,200 Y**	1,200 H
	2012	**4,700 Y**	670 Y
04-601 Surface Water Protection Well	2001	**2,620 J**	132
	2002	**2,600**	570
	2003	1,000	160
	2004	**2,520**	619
	2005	**2,850**	345
	2006	1,100	82
	2007	180 Y	100 U
	2008	120 Y	100 U
	2009	100 YJ	NP
	2010	97 U	100 U
	2011	98 Y	NP
	2012	280 Y	100 U
Endpoint Criteria		1,500	1,300

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

The following are the results of the statistical evaluation:

- Well 04-175: The DRO concentration exhibits a decreasing trend at the 80 percent confidence interval and no trend at the 95 percent confidence interval for data from 2005 through 2012. Sen's evaluation indicates the trend is statistically significant with a median slope of -248.
- Well 04-290: DRO exhibits an increasing trend at the 80 percent confidence interval for data from 2005 through 2012.
- Well 04-306: DRO exhibits no trend at the 80 or 95 percent confidence intervals. The coefficient of variation indicates that the concentration is stable.

22.5 CONCLUSIONS

This section presents conclusions based on a review of groundwater monitoring conducted at the Tanker Shed, UST 49424 site in 2012. The conclusions are as follows:

- Groundwater Flow: Based on the water levels measured in 2012, the interpreted groundwater flow direction at the site is to the west, toward East Canal.
- MNA: The groundwater parameters obtained during the 2012 LTM event showed evidence that natural attenuation of petroleum hydrocarbons continues to occur at the site.
- One well (04-301) was observed to have free product at trace levels.
- Well 04-175: DRO has been detected at a concentration above the endpoint criteria every year sampled since sampling started in 2001. The DRO concentration shows a statistically significant decreasing trend at the 80 and 95 percent confidence intervals. 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 but the concentration is stable at the 95 percent confidence interval. GRO has remained below the endpoint criteria since 2005 (eight consecutive sampling events). This well represents the downgradient edge of the plume.
- Well 04-306: DRO remained above the endpoint criteria in 2012. GRO was detected at a concentration below the endpoint criteria for the second consecutive sampling event. 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 and GRO have remained below endpoint criteria since at least 2006 (seven consecutive sampling events). This well is located downgradient of the plume.

22.6 RECOMMENDATIONS

Concentrations of GRO have remained below endpoint criteria in all samples collected from site wells for at least two consecutive sampling events. Therefore, it is recommended that sampling for GRO be discontinued at the site (wells 04-290, 04-306, and 04-601).

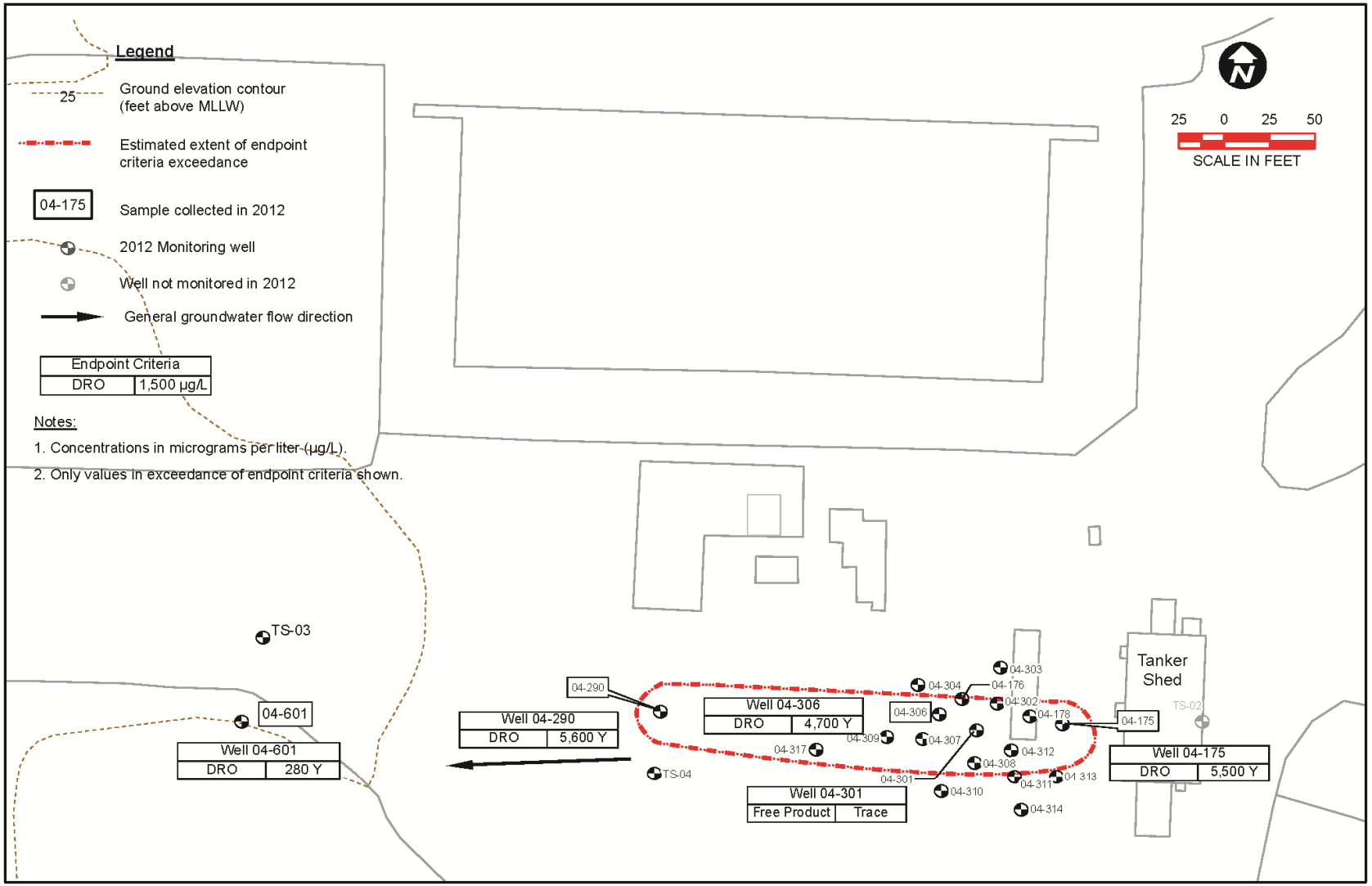
Free product have not been observed at the following 13 onsite wells at a minimum of four sampling events (since 2008): 04-176, 04-178, 04-290, 04-303, 04-304, 04-307, 04-308, 04-309, 04-310, 04-311, 04-314, 04-317, and TS-04. Because of this, it is recommended that monitoring at these locations be discontinued.

- 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 reduced to every odd year with the next monitoring to occur in 2013.

Table 22-3. 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	5,600 Y	1,500	8	-14	Decreasing	No trend	NA	-248	Yes	-917	-167
04-290	DRO	Yes	5,900 Y	1,500	8	9	Increasing	No trend	NA	NC	NC	NC	NC
04-306	DRO	Yes	7,200 Y	1,500	6	5	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 22-1 Tanker Shed, UST 42494 Sample Locations	Task Order 55 Adak Island, AK 2012 Annual Groundwater Monitoring Report

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APPENDIX A

FIELD FORMS AND LOGBOOK

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Former Power Plant T-1451 Well No.: 01-118

Inspector(s): B Giles / D Balmer Date/Time: 9/1/12 1510

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Cloudy, windy, cold ~50° F (GW)

	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 PVC slip cap		
5. Specify size and number of bolts on flush-mount cap: 3 - 9/16 in 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	☐	☒
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 (GW)	☐	☒

16. Previous well depth: 29.41' Current well depth: 29.46'

17. Depth to water: 16.62' tc No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen 15.15 - 30.15' gs

Sat Screen - 16.62 - 29.41'

Intake - 23.01'

✓ GW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Former Power Plant Sample Location: 01-118

Inspector(s): B. Giles / D. Balmer Date/Time: 9/1/12 1510

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Cloudy, windy, cold (~50° F) SW

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 16.62'

Total Depth of Well Below Top of Casing (feet): 29.41' (in 2011) SW

Purge Method: Low flow peristaltic Intake set at 23.0' ft.

Calculate if well parameters do not stabilize per the work plan: (using 2011 DTB) SW

Length of Water Column in Well (feet): 12.79

Gallons per Foot: 0.16 g Gallons in Well: 2.05 g

Three Times Casing Volume: 6.14 g Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 01-118-2012

Time Sample Collected: 1550

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	1532	6.11	0.679	107.0	0.23	6.77	0.0	-49
.5	1537	6.35	0.653	111.0	0.00	6.48	0.0	-57
1.0	1542	6.30	0.648	108.0	0.00	6.51	0.0	-58
1.5	1547	6.29	0.650	106.0	0.00	6.48	0.0	-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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Former Power Plant T-1451 Well No.: 01-150

Inspector(s): B Giles / D. Balmer Date/Time: 9/1/12 1345

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, rain, wind, cold (~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: 1½ in 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: NA	☐	☒

16. Previous well depth: 27.05' . Current well depth: 27.05' .

17. Depth to water: 20.04' tc No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen 14.0 - 24.0 ft
17.0 - 27.0 tc

Sat screen 20.0 - 27.0 tc

Intake @ 23.5'

✓ slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Former Power Plant Sample Location: 01-150

Inspector(s): B.G.les / D. Balmer Date/Time: 9/1/12 1345

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Cloudy, windy, rain, cold (~50°F) GW

Well Data

Diameter of Well Casing: 1½ in.

Depth to Water Below Top of Casing (feet): 20.04'

Total Depth of Well Below Top of Casing (feet): 27.05' (2011) (1 2012)

Purge Method: Low flow peristaltic Intake at 23.5' ft

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.01

Gallons per Foot: 0.10 g Gallons in Well: 0.70

Three Times Casing Volume: 2.1 g Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 01-150-2012

Time Sample Collected: 1435

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	1413	6.06	0.605	11.5	0.33	7.52	0.0	26
.5	1418	6.12	0.514	15.2	0.72	6.94	0.0	5
1.0	1423	6.14	0.498	29.1	0.00	7.01	0.0	4
1.5	1428	6.12	0.487	29.2	0.00	7.02	0.0	5
2.0	1433	6.12	0.484	28.7	0.00	6.95	0.0	4

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

√SKJ

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Former Power Plant Well No.: 01-151

Inspector(s): A. Lewis, R. Bajcl Date/Time: 9/1/12 1410

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, overcast, 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:		
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 _____.		
14. Is the well depth consistent with past depth measurements?	☐	☐
15. Are there well protections? Type: _____	☐	☐

16. Previous well depth: _____ Current well depth: _____.

17. Depth to water:

18. PID reading at wellhead: _____ Breathing Zone: _____

Additional notes: *Well not located. New well in location where 01-151 should be. Do not sample new well, as per A. Venik (Navy RPM)

V SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Former Power Plant Sample Location: 01-151

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/1/12 1410

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, overcast, wind

Well Data

Diameter of Well Casing: 1.5"

Depth to Water Below Top of Casing (feet):

Total Depth of Well Below Top of Casing (feet):

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: 0.10 Gallons in Well:

Three Times Casing Volume: Gallons Purged from Well:

Water Sample Data

Sample Number: 01-151-2012

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)				
N/A		N/A		N/A				

Notes: *Well not located. New well in location where 01-151 should be. Do not sample new well, as per A. Venik (Navy RPM)

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

Seep and Shoreline
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring | Project No.: TO 55

Site Name: Former Power Plant | Well No.: East Canal

Inspector(s): A. Lewis, R. Boyd | Date/Time: 9/1/12 1510

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, overcast, moderate wind

		Yes	No
1.	Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate.	☐	☐

Evidence of possible seeps located at boom locations 9/12, 11. See photos 9/12/12 9/12/12

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 booms 9/12

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 (30ft x 4ft) See photos 9/12/12

Surface sheening along booms 9/12 (80ft x 2ft) See photos 9/12/12

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.	☐	☐

Submerged drum ~10ft center of East Canal waterbody adjacent to NL-08 (Unclear to see drum in photo 9/12/12 1034 due to glare)

Additional Notes: New ~75ft of remediated shoreline upgradient from boom 9/12

See photos

Sediment Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Former Power Plant Sample No.: NL-08S-2012 [1240]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/1/12 1225

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, overcast, rain, moderate wind

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☒	☐

Dark grey/black, light brown at 1/8" surface, medium grain sand, no organic matter in sample or at sample location, 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?	☐	☐

Submerged drum ~10 ft center of East Canal waterbody adjacent to sample location (unable to see drum in photo 9/12/12 1039 due to glare)

4. Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☒	☐

Light sheening after sediment 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?..... Green wing teal, eagle, raven	☒	☐

Additional Notes:

Surface Water Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Former Power Plant Sample No.: NL-08-2012 [1300]

Inspector(s): A. Lewis, R Boyd Date/Time: 9/1/12 1255

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, overcast, moderate wind, rain

		Yes	No
1.	Is there any sheen or visible contamination on or in the water? Sheen seen along the walls on shoreline and disturbing sediment	☒	☐
2.	Are the any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity.....	☒	☐

Faint petroleum odor

3.	Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☒	☐
4.	If so, describe: Submerged 55 gal drum 10 ft from sample location, as previously noted in 2011 photo of drum.		
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.	☒	☐

Light iron colored sediment along the surface of banks, sediment black with light sheening.

6. Describe the sample (clear, colored, muddy, odors, etc.):

Moderately clear, faint petroleum odor

7.	Is there vegetation growing nearby?	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? Greenwing teal, Shorebirds, eagle, raven ...	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

40 ft wide, 16" 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:

V SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Former Power Plant Sample Location: NL-08

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/1/12 1255

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°, wind, overcast, rain

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-08-2012

Time Sample Collected: 1300

Sampling Method: Grab

Remarks (Color/Odor): No odors

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)
Final	1300	6.59	0.840	11	9.44	13.9	0.0	-41

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: MS/MSD on DRO 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

V 3/14

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Well No.: 04-100

Inspector(s): B Giles / D Baker Date/Time: 9/3/12 0950

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain / Wind ~50°F (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? lid blown off-retrieved	☑	☐
4. Specify type of cap: 1½ in 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: NA (SW)	☐	☒

16. Previous well depth: 34.57' . Current well depth: 34.58' .

17. Depth to water: 28.11' tc. No product

18. PID reading at wellhead: 531 ppm Breathing Zone: 0.0

Additional notes:

Screen - 21.0 - 31.0 gs
" 24.0 - 34.0 tc.
Sat screen - 28.11 - 34.0
Intake - 31.0' tc.

✓ DLJ

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Sample Location: 04-100

Inspector(s): BGiles / DBalmer Date/Time: 9/4/12 0945

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Strong wind 35-50 mph, cloudy, min ~50°F SW

Well Data

Diameter of Well Casing: 1½ in.

Depth to Water Below Top of Casing (feet): 28.11'

Total Depth of Well Below Top of Casing (feet): 34.58'

Purge Method: Low flow peristaltic Intake at 31.0' to

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.47'

Gallons per Foot: 0.109 Gallons in Well: 0.65 g

Three Times Casing Volume: 1.94 g Gallons Purged from Well: 1.95

Water Sample Data

Sample Number: 04-100-2012 and 04-110-2012 (Dup.)

Time Sample Collected: 1030 1040

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): None

Stabilized? ~~YES~~ No 3 Casing Volumes Removed? Yes

SJW 9/4/12

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1006	6.29	0.253	251	1.32	5.97	0.0	2
.33	1010	6.26	0.259	88.8	0.00	5.76	0.0	-15
.66	1014	6.26	0.280	38.4	0.00	5.76	0.0	-23
.99	1018	6.30	0.294	23.5	0.00	5.80	0.0	-27
1.32	1022	6.30	0.296	18.6	0.00	5.78	0.0	-30
1.65	1026	6.33	0.300	21.2	0.00	5.80	0.0	-32
1.98	1030	6.36	0.301	45.1	0.00	5.81	0.0	-34

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

√ SJW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Well No.: 04-201

Inspector(s): B Giles / D Balmer Date/Time: 9/3/12 0840

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain, Wind ~50° F GW

	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 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? Trace	☒	☐
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: 33.45'. Current well depth: 32.31'.

17. Depth to water: 25.63' to. Trace product

18. PID reading at wellhead: 125 ppm Breathing Zone: 0.0

Additional notes:

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Well No.: 04-202

Inspector(s): BGiles / D Balmer Date/Time: 9/3/12 0855

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain, Wind ~50°F GD

	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 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: Petroleum odor on probe	☒	☐
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: _____	☐	☒

16. Previous well depth: 33.42'. Current well depth: 33.43'.

17. Depth to water: 25.77' tc DTP - 25.76' tc.

18. PID reading at wellhead: 331 ppm Breathing Zone: 0.0

Additional notes: _____

Screen - 15.0 - 30.0' bgs
Screen - 18.00 - 33.0' tc
Sat screen 24.77 - 33.0
Intake - 28.9' tc.

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Sample Location: 04-202

Inspector(s): B Giles / D Bodmer Date/Time: 9/4/12 0750

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain, Strong Wind 35-50mph, ~50°F (SW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 25.77'

Total Depth of Well Below Top of Casing (feet): 33.43'

Purge Method: Low flow peristaltic Intake at 28.9' ft.

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.66

Gallons per Foot: 0.16 g Gallons in Well: 1.23 g

Three Times Casing Volume: 3.68 g Gallons Purged from Well: 4.0

Water Sample Data

Sample Number: 04-202-2012

Time Sample Collected: 0900

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): Slugs of orange/brown floc in 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	0815	5.89	0.353	9.1	2.32	5.89	0.0	56
1.5	0820	5.91	0.275	20.9	0.61	5.49	0.0	26
2.0	0825	5.91	0.256	21.6	0.19	5.43	0.0	10
2.5	0830	5.97	0.256	20.7	0.10	5.35	0.0	-3
3.0	0835	6.02	0.256	27.4	0.05	5.37	0.0	-9
3.5	0840	6.07	0.253	56.0	0.03	5.56	0.0	-12
3.0	0845	6.14	0.249	58.4	0.10	6.32	0.0	-11
3.5	0850	6.18	0.245	71.5	0.03	6.74	0.0	-11
4.0	0855	6.22	0.248	77.6	0.06	6.69	0.0	-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

✓ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GC1 Compound Well No.: 04-203

Inspector(s): B Giles / D Belcher Date/Time: 9/3/12 0910

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain, Wind 35-50 mph, ~50° F (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-in 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: NA (SW)	☐	☒

16. Previous well depth: 33.32'. Current well depth: 33.31'.

17. Depth to water: 26.27' No product

18. PID reading at wellhead: 124 ppm Breathing Zone: 0.0

Additional notes:

✓ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Well No.: 04-204

Inspector(s): B Giles / D Belmer Date/Time: 9/3/12 0815

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy rain, strong wind 50°

	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 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? 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: HC 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: Bollards - 3	☒	☐

16. Previous well depth: 33.04'. Current well depth: 33.04.

17. Depth to water: 25.68' tc No product

18. PID reading at wellhead: 488 Breathing Zone: 0.0

Additional notes:

Screen - 15.0 - 30.0 gs
Screen - 18.0 - 33.0' tc.
Sat screen - 25.68 - 33.0' tc
Intake - 29.3' tc.

√ sw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GC1 Compound Sample Location: 04-204

Inspector(s): B Giles / D Balmer Date/Time: 9/3/12 1405

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain / Wind 35-45 mph ~50°F SW

Well Data

Diameter of Well Casing: 2 in.

Depth to Water Below Top of Casing (feet): 25.68' tc.

Total Depth of Well Below Top of Casing (feet): 33.04

Purge Method: Low flow peristaltic Intake set at 29.3' tc.

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.36'

Gallons per Foot: 0.16 g Gallons in Well: 1.18 g

Three Times Casing Volume: 3.53 g Gallons Purged from Well: 2.0 g

Water Sample Data

Sample Number: 04-204-2012

Time Sample Collected: 1445

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	1424	6.49	0.227	57.6	0.52	6.75	0.0	-8
.5	1429	6.41	0.226	47.4	0.00	6.32	0.0	-15
1.0	1434	6.43	0.221	37.4	0.00	6.51	0.0	-13
1.5	1439	6.43	0.224	40.6	0.00	6.56	0.0	-16
2.0	1444	6.44	0.223	39.6	0.00	6.56	0.0	-17

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Well No.: 04-210

Inspector(s): B Gibes / D Balmer Date/Time: 9/3/12 1052

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain / Wind ~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-in butterfly		
5. Specify size and number of bolts on flush-mount cap: 3-9/16 bolts 2-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	☐	☒
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: Bollard - 1	☒	☐

16. Previous well depth: 33.06. Current well depth: 32.91'.

17. Depth to water: 24.72' tc. No product

18. PID reading at wellhead: 10.5 ppm Breathing Zone: 0.0

Additional notes:

Screen 23.0 - 33.0 gs

Set screen 24.7 - 32.9' tc.

Intake - 28.5' tc

✓

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Sample Location: 04-210

Inspector(s): B Giles / D Balmer Date/Time: 9/4/12 1055

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Strong wind 35-50 mph / cloudy, rainy ~50°F

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 24.72' tc

Total Depth of Well Below Top of Casing (feet): 32.91' tc

Purge Method: Low flow peristaltic Intake set at: 28.8' tc

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 g

Three Times Casing Volume: 3.93 Gallons Purged from Well: 2.0 g

Water Sample Data

Sample Number: 04-210-2012

Time Sample Collected: 1138

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	1117	6.36	0.302	0.0	1.94	5.83	0.0	-26
.5	1122	6.38	0.297	2.9	0.00	5.63	0.0	-31
1.0	1127	6.35	0.288	1.4	0.00	5.65	0.0	-31
1.5	1132	6.35	0.280	2.7	0.00	5.65	0.0	-34
2.0	1137	6.35	0.284	7.7	0.00	5.64	0.0	-36

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

√ SiW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Well No.: 04-211

Inspector(s): B Giles / D Balmer Date/Time: 9/3/12 0915

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain / wind ~50° F (W)

	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? 2-in butterfly	☒	☐
4. Specify type of 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? Water in flushmount	☐	☒
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	☒	☐
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: Ballard - 1	☒	☐

16. Previous well depth: 30.25'. Current well depth: 30.26'.

17. Depth to water: 23.75' TC No product

18. PID reading at wellhead: 165 ppm Breathing Zone: 0.0

Additional notes:

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI compound Well No.: 04-213

Inspector(s): B.Giles / D Belmar Date/Time: 9/3/12 0935

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain / Wind ~ 50° F Est

	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 butterfly - needs replacement		
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? dry	☒	☐
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	☒	☐
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: Bollard - 1	☒	☐

16. Previous well depth: 29.93' . Current well depth: 29.92' .

17. Depth to water: 23.76' tc. No product

18. PID reading at wellhead: 468 ppm Breathing Zone: 0.0

Additional notes:

Screen 20.0 - 30.0' bgs

Set Screen 23.76 - 29.9'

Intake - 26.8' tc.

√SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Sample Location: 04-213

Inspector(s): B Giles / D Balmer Date/Time: 9/4/12 1320

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly cloudy, windy ~50° F SW

Well Data

Diameter of Well Casing: 2 in

Depth to Water Below Top of Casing (feet): 23.76'

Total Depth of Well Below Top of Casing (feet): 29.92'

Purge Method: Low flow peristaltic Intake at 26.8' ft.

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.16'

Gallons per Foot: 0.16 g Gallons in Well: 0.99 g

Three Times Casing Volume: 2.96 g Gallons Purged from Well: 2.31 g

Water Sample Data

Sample Number: 04-213-2012

Time Sample Collected: 1425

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	1351	6.24	0.413	10.0	0.51	6.67	0.0	28
.33	1355	6.23	0.295	28.4	0.04	6.53	0.0	-5
.66	1359	6.20	0.271	25.2	0.00	6.42	0.0	-12
.99	1404	6.17	0.257	24.2	0.00	6.33	0.0	-19
1.32	1408	6.24	0.253	36.6	0.00	6.48	0.0	-20
1.65	1412	6.24	0.251	42.0	0.00	6.38	0.0	-22
1.98	1416	6.24	0.249	41.8	0.00	6.35	0.0	-23
2.31	1420	6.25	0.246	41.6	0.00	6.41	0.0	-25

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Well No.: 04-701

Inspector(s): B Giles / D Balmer Date/Time: 9/3/12 1105

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy rain / wind 35-45 mph ~50°F SLW

	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 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: Bollards - 4	☒	☐

16. Previous well depth: 21.39'. Current well depth: 21.30' sft

17. Depth to water: 14.13' tc No product

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes:

Screen - 7.75' - 17.75' gs

Screen - 10.75' - 20.75' tc ~~10.25 - 20.25~~

Sat Screen 14.13 - 20.75'

Intake 17.5' tc

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: GCI Compound Sample Location: 04-701

Inspector(s): B Giles / D Balmer Date/Time: 9/3/12 1300

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Heavy Rain / Wind 35-45 mph ~50° F (W)

Well Data

Diameter of Well Casing: 2 in.

Depth to Water Below Top of Casing (feet): 14.13' TOC

Total Depth of Well Below Top of Casing (feet): 21.39' TOC (in 2011), 21.32' TOC (in 2012) (W)

Purge Method: Low flow peristaltic Intake set at 17.5' TOC

Calculate if well parameters do not stabilize per the work plan: (using 2011 DTB)

Length of Water Column in Well (feet): 7.26'

Gallons per Foot: 0.16 g Gallons in Well: 1.16

Three Times Casing Volume: 3.48 g Gallons Purged from Well: 3.5 g

Water Sample Data

Sample Number: 04-701-2012

Time Sample Collected: 1350

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): None

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	1320	5.99	0.208	19.3	1.41	6.84	0.0	73
.5	1324	6.19	0.265	6.9	0.00	6.68	0.0	9
1.0	1328	6.28	0.285	5.7	0.00	6.63	0.0	-9
1.5	1332	6.33	0.290	9.0	0.00	6.66	0.0	-19
2.0	1336	6.35	0.293	17.8	0.00	6.61	0.0	-21
2.5	1340	6.38	0.296	20.8	0.00	6.56	0.0	-27
3.0	1344	6.38	0.300	29.2	0.00	6.54	0.0	-28
3.5	1348	6.39	0.297	32.5	0.00	6.58	0.0	-31

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-300

Inspector(s): B Giles / D. Balmer Date/Time: 8/28/12 1115

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool ~50° F (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-in 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: strong 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 0.69'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards - 3	☒	☐

16. Previous well depth: 12.57'. Current well depth: 12.55'.

17. Depth to water: 10.94' DTP 10.25'

18. PID reading at wellhead: 67.3 ppm Breathing Zone: 0.0 ppm

Additional notes: sock in well

1/SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-301

Inspector(s): JOHN HIGHSTONE Date/Time: 8-28-12 / 0858

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 10 MPH WIND, 48°

	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		
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? NO LID, 8" I PLUG IN MONUMENT CASING	☒	☐
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: 19.51' TC. Current well depth: 19.53' TC.

17. Depth to water: 15.67'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING WEST

√ DW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-451

Inspector(s): JOHN HIGHSTONE Date/Time: 8.28.12 / 1040

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 5 MPH WIND, 50°

	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? MONUMENT LID 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 N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 BALLARDS	☒	☐

16. Previous well depth: 21.13' TC. Current well depth: 21.12' TC.

17. Depth to water: 9.25'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING SOUTH

✓ 9/5/12

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-452

Inspector(s): JOHN HIGHSTONE Date/Time: 8-28-12/0910

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 10 MPH WIND, 50°

	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 BALLARDS	☒	☐

16. Previous well depth: 20.11' TC. Current well depth: 20.10' TC.

17. Depth to water: 9.68'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING WEST

✓ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMBC Sample Location: 02-452

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/29/12 1530

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54° F, Moderate wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 9.73

Total Depth of Well Below Top of Casing (feet): 20.10

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 10.37

Gallons per Foot: 0.16 Gallons in Well: 1.66

Three Times Casing Volume: 4.98 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 02-452-2012 Dup: 02-462-2012

Time Sample Collected: 1610 Dup: 1620

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	1550	6.45	0.701	8	2.24	8.55	0.0	-88
.5	1554	6.45	0.705	5	1.21	8.68	0.0	-96
1.0	1558	6.46	0.709	3	0.95	8.55	0.0	-101
1.5	1602	6.48	0.712	2	0.94	8.55	0.0	-104
2.0	1606	6.49	0.713	0	0.92	8.53	0.0	-107

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone. PID: 0.0 ppm

Dup for 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-453

Inspector(s): JOHN HIGHSTONE Date/Time: 8.28.12 / 1133

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 5 MPH WIND, 50°

	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... MEDIUM 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: 2 BALLARDS	☒	☐

16. Previous well depth: 15.08' TC. Current well depth: 15.08' TC.

17. Depth to water: 9.58'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING SOUTH

√ SIW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMBC Sample Location: 02-453

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/29/12 1055

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, moderate wind, partial overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 9.42

Total Depth of Well Below Top of Casing (feet): 15.08

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.66

Gallons per Foot: 0.16 Gallons in Well: 0.91

Three Times Casing Volume: 2.72 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 02-453-2012

Time Sample Collected: 1125

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear w/ trace 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	1109	6.51	3.21	13	1.15	9.02	0.0	-83
.5	1112	6.51	3.05	12	0.00	8.96	0.0	-87
1.0	1116	6.52	3.02	13	0.00	8.95	0.0	-89
1.5	1120	6.53	3.00	13	0.00	8.91	0.0	-93

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 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

√ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-455

Inspector(s): B Giles / D. Balmer Date/Time: 8/28/12 1145

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, threatening. ~50° F (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-in 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? collar is cracked + crumbling	☒	☐
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: Bollards - 2	☒	☐

16. Previous well depth: 17.95'. Current well depth: 17.90.

17. Depth to water: 12.40' tc. No product

18. PID reading at wellhead: 0.1 ppm Breathing Zone: 0.0

Additional notes:

√ 9/4/12

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Sample Location: 02-455

Inspector(s): B Giles / D Balmer Date/Time: 8/29/12 1525

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Mostly sunny, windy, cool ~50° F (SW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 12.10' te.

Total Depth of Well Below Top of Casing (feet): 17.90'

Purge Method: Low flow peristaltic Intake at 15.0'

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.8'

Gallons per Foot: 0.16 g Gallons in Well: 0.93 g

Three Times Casing Volume: 2.78 g Gallons Purged from Well: 3.0 g

Water Sample Data

Sample Number: 02-455-2012

Time Sample Collected: 1610

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): None

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	1446	6.49	20.3	0.0	1.25	8.47	1.2	22
.5	1450	6.56	20.3	2.5	0.82	8.42	1.2	8
1.0	1454	6.57	20.3	2.6	0.61	8.37	1.2	-2
1.5	1458	6.57	20.2	3.4	0.44	8.33	1.2	-8
2.0	1502	6.58	20.0	4.7	0.29	8.29	1.2	-15
2.5	1506	6.58	19.9	11.9	0.20	8.25	1.2	-19
3.0	1510	6.59	19.7	14.6	0.06	8.24	1.1	-22

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

Screen 5-15 gs
8-18' te
Sat. 12.1-17.9'
Intake 15.0' te.

✓slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-461

Inspector(s): John Hechstone Date/Time: 8.28.12 / 0946

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 15 MPH WIND, 50°

	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: NO BOLTS, (3) 9/16" BOLTS MISSING		
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: 14.31' TC. Current well depth: 14.32' TC.

17. Depth to water: 7.13'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING EAST

✓ scanned

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMBC Sample Location: 02-461

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/29/12 0950

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F, sunny, light wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 7.03

Total Depth of Well Below Top of Casing (feet): 14.32

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.29

Gallons per Foot: 0.16 Gallons in Well: 1.17

Three Times Casing Volume: 3.50 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 02-461-2012

Time Sample Collected: 1030

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear / light smell of petroleum

Stabilized? YES 3 Casing Volumes Removed? NO

Purge Vol. (gallons)	Time (m/n)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
initial	1011	6.27	0.652	8	3.84	8.22	0.0	-63
.5	1015	6.29	0.644	5	3.51	8.11	0.0	-68
1.0	1019	6.30	0.640	5	3.47	8.08	0.0	-71
1.5	1023	6.31	0.642	4	3.41	8.07	0.0	-73

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-463

Inspector(s): B Giles / D Balmer Date/Time: 8/28/12 1214

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, drizzle, mosquitos ~50° F 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-in 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: slight HC 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: Bollards - 3	☒	☐

16. Previous well depth: 15.16. Current well depth: 15.18.

17. Depth to water: DGB 8/28/12 10.12' tc No product

18. PID reading at wellhead: 0.1 ppm Breathing Zone: 0.0

Additional notes:

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-478

Inspector(s): B Giles / D Balmer Date/Time: 8/28/12 1137

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool ~50° F (2L)

	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 slip cap		
5. Specify size and number of bolts on flush-mount cap: bolts missing		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? 3 bolts missing	☐	☒
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: FM	☐	☒

16. Previous well depth: 13.70', Current well depth: 13.65'.

17. Depth to water: 8.20' tc. No product

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0 ppm

Additional notes:

/ slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Sample Location: 02-478

Inspector(s): B Giles / D Balmer Date/Time: 8/29/12 1035

Company: Sealaska Environmental Services, LLC

Weather/Temperature: partly cloudy, windy, mist, rainbow ~50° F slw

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 7.94'

Total Depth of Well Below Top of Casing (feet): 13.65'

Purge Method: Low flow peristaltic Intake at 10.7'

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.71'

Gallons per Foot: 0.16g Gallons in Well: 0.91g

Three Times Casing Volume: 2.74g Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 02-478-2012

Time Sample Collected: 1130

Sampling Method: low flow peristaltic

Remarks (Color/Odor): No

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	1105	6.08	0.845	24.0	1.12	7.74	0.0	-70
.5	1110	6.29	0.762	30.5	0.00	7.37	0.0	-104
1.0	1115	6.13	0.693	29.5	0.00	7.29	0.0	-99
1.5	1120	6.12	0.687	29.6	0.00	7.29	0.0	-100
2.0	1125	6.15	0.683	32.2	0.00	7.28	0.0	-104

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

screen - 4.8-14.8

sat 7.9 - 13.6

Intake - 10.75'

✓ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-479

Inspector(s): B. Giles / D Balmer Date/Time: 4/28/12 1035

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, mild, threatening ~50°F (W)

	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 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards - 2	☒	☐

16. Previous well depth: 19.53'. Current well depth: 19.50'.

17. Depth to water: 12.97 A tc No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

/ MW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-497

Inspector(s): JOHN HIGHSTONE Date/Time: 8.28.12 / 1149

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 5 mph WIND, 52°

	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 - 9/16" BOLTS BROKEN OFF		
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: MEDIUM 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 .08.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 10.68' TC. Current well depth: 10.67' TC.

17. Depth to water: 7.41'

18. PID reading at wellhead: 4.2 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING EAST

REMOVED ABSORBENT SOCK

DTP 7.33

√ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-815

Inspector(s): B Giles / D Balmer Date/Time: 8/28/12 1054

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, threatening ~50° F (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-in 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: slight HC odor	☒	☐
10. Is there an oily sheen on the water? on probe	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness 0.05'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards 3	☒	☐

16. Previous well depth: 19.67. Current well depth: 19.69.

17. Depth to water: 14.31' DTP - 14.26'

18. PID reading at wellhead: 2.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Sock in well

/ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-816

Inspector(s): B Giles / D. Balmer Date/Time: 8/28/12 1128

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool ~50° F (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-in 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 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 NA		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards - 3	☒	☐

16. Previous well depth: 17.41. Current well depth: 17.31.

17. Depth to water: 11.00 ft No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: _____

_____

_____

_____

✓ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-817

Inspector(s): John Heighstone Date/Time: 8.28.12 / 0925

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 15 mph WIND, 50°

	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 BOLLARDS	☒	☐

16. Previous well depth: 17.14' TC. Current well depth: 17.15' TC.

17. Depth to water: 10.33'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING EAST

✓ JW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMBC Sample Location: 02-817

Inspector(s): A. Lewis, R. Bayl Date/Time: 8/29/12 / 0845

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50° F, windy, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 10.10

Total Depth of Well Below Top of Casing (feet): 17.15

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.05

Gallons per Foot: 0.16 Gallons in Well: 1.13

Three Times Casing Volume: 3.38 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 02-817-2012

Time Sample Collected: 0915

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	0900	6.25	0.799	∅	1.64	7.74	0.0	-91
.5	0904	6.25	0.797	∅	0.00	7.85	0.0	-98
1.0	0908	6.26	0.790	∅	0.00	7.85	0.0	-100
1.5	0912	6.26	0.794	∅	0.00	7.84	0.0	-102

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone, PID: 0.0 ppm

Well Casing Volumes

GAL/FOOT ¼" = 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

✓ slow

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: CB2-518

Inspector(s): JOHN HIGHSTONE Date/Time: 8.28.12 / 1054

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 5 MPH WIND, 50°

	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 PETROLEUM ODOR	☒	☐
10. Is there an oily sheen on the water? LIGHT SHEEN	☒	☐
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 BALLARDS	☒	☐

16. Previous well depth: 16.62' TC. Current well depth: 16.62' TC.

17. Depth to water: 9.66'

18. PID reading at wellhead: 2.3 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING SOUTH

REMOVED ABSORBENT SOCK

NOTE: After removing absorbent sock on 8/28/12, the well was gauged on 8/29/12 prior to scheduled sampling. Product was observed as indicated on Water Sampling Log.

-SLW 8/31/12

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMBC Sample Location: 02-818

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/20/12 0810

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, breezy, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 9.19

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):

Gallons per Foot: 0.16 Gallons in Well:

Three Times Casing Volume: Gallons Purged from Well:

Water Sample Data

Sample Number: 02-818-2012

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)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 0.00 ppm

DTP = 9.14 ftbtoc DTW = 9.19 ft btoc PT = 0.05 ft

Did not sample, as per CMP

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: 02-819

Inspector(s): JOHN HIGHSTONE Date/Time: 8-28-12 / 1005

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, LIGHT RAIN, 15 MPH WIND, 50°

	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) 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	☒	☐
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: 14.54' TC. Current well depth: 14.54' TC.

17. Depth to water: 7.67'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING WEST

√ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: E-201

Inspector(s): JOHN HIGHSTONE Date/Time: 8.28.12 / 0855

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, LIGHT RAIN, 5 mph WIND, 45°

	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		
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: 18.91' TC. Current well depth: 18.87' TC.

17. Depth to water: 13.55'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING NORTH

JW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMBC Sample Location: E-201

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/30/12 1000

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, overcast, light wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 13.47

Total Depth of Well Below Top of Casing (feet): 18.87

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.40

Gallons per Foot: 0.16 Gallons in Well: 0.86

Three Times Casing Volume: 2.59 Gallons Purged from Well: 3

Water Sample Data

Sample Number: E-201-2012

Time Sample Collected: 1055

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear - light smell 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	1022	6.51	0.291	5	3.84	6.05	0.0	-64
.5	1026	6.37	0.287	7	2.51	5.97	0.0	-64
1.0	1030	6.33	0.286	8	2.31	5.96	0.0	-70
1.5	1034	6.33	0.290	11	2.20	6.02	0.0	-79
2.0	1038	6.36	0.292	14	2.14	6.03	0.0	-86
2.5	1042	6.38	0.296	17	2.05	6.03	0.0	-93
3.0	1046	6.41	0.298	15	1.94	6.06	0.0	-99

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 0.0 ppm

Fine black particulate seen in flowcell throughout purge.

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

✓ JLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: NMCB-04

Inspector(s): John Hightstone Date/Time: 8-28-12/0817

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, LIGHT RAIN, 5 mph WIND, 45°

	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		
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: 18.47' TC. Current well depth: 18.48' TC.

17. Depth to water: 12.33'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1- PICTURE FACING SOUTH

SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMBC Sample Location: NMBC-04

Inspector(s): A. Lewis, R. Byrd Date/Time: 8/29/12 1430

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F, moderate wind, partial overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 12.35

Total Depth of Well Below Top of Casing (feet): 18.48

Purge Method: low-flow peristaltic.

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.13

Gallons per Foot: 0.16 Gallons in Well: 0.98

Three Times Casing Volume: 2.94 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: NMBC-04-2012

Time Sample Collected: 1510

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	1444	6.43	0.283	21	2.24	7.88	0.0	-55
.5	1448	6.37	0.277	19	0.00	7.56	0.0	-56
1.0	1452	6.40	0.272	14	0.00	7.44	0.0	-63
1.5	1456	6.40	0.275	14	0.00	7.46	0.0	-65
2.0	1500	6.41	0.277	13	0.00	7.45	0.0	-66

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 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

✓ JW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: NMCB-65

Inspector(s): John Hightstone Date/Time: 8-28-12 / 1337

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast, Light Rain, 5 mph wind, 55°

	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 - 9/16" bolts, 1 missing		
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: 10.80' TC. Current well depth: 10.81' TC.

17. Depth to water: 4.95'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: Hard Bottom

1 Picture facing West

slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: NMCB-07

Inspector(s): JOHN HIGHSTONE Date/Time: 8/28/12/1112

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 5 MPH WIND, 50°

	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: 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: .37		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 BOLLARDS	☒	☐

16. Previous well depth: 19.20' TC. Current well depth: 19.21' TC.

17. Depth to water: 10.53'

18. PID reading at wellhead: 9.2 ppm Breathing Zone: 0.0 ppm

Additional notes: SOFT BOTTOM

1 PICTURE FACING EAST

REMOVED (2) ABSORBENT SOCKS

DTP 10.16

SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: NMCB-08

Inspector(s): JOHN HIGHSTONE Date/Time: 8.28.12 / 1208

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 5 MPH WIND, 55°

	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 - 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: 15.70' TC. Current well depth: 15.70' TC.

17. Depth to water: ~~8.65'~~ 8.28.12 (9.65')

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING EAST

SIW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Sample Location: NMCB-08

Inspector(s): A Lewis, R. Byd Date/Time: 8/30/12 0830

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51° F, overcast

Well Data

Diameter of Well Casing: 4"

Depth to Water Below Top of Casing (feet): 6.60

Total Depth of Well Below Top of Casing (feet): 15.70

Purge Method: low-flow Peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 9.10

Gallons per Foot: 0.65 Gallons in Well: 5.92

Three Times Casing Volume: 17.75 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: NMCB-08-2012 Dup: NMCB-18-2012

Time Sample Collected: 0925 Dup: 0935

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	0900	6.42	2.44	15	0.17	8.17	0.0	-89
.5	0904	6.58	2.14	15	0.00	8.15	0.0	-98
1.0	0908	6.57	2.12	15	0.00	8.18	0.0	-103
1.5	0912	6.59	2.11	9	0.00	8.19	0.0	-106
2.0	0916	6.60	2.10	9	0.00	8.18	0.0	-109
2.5	0920	6.61	2.08	8	0.00	8.17	0.0	-112

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 0.1 ppm

Dup for Benzene & DRO only

(A few large pieces of black particulate seen throughout purge, not affecting turbidity).

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: NMCB-09 1155

Inspector(s): B. Giles / D. Balmer Date/Time: 8/28/12 1155

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, ~50° F Gle

	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. 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: Bollards - 3	☒	☐

16. Previous well depth: 18.55 . Current well depth: 18.57' tc.

17. Depth to water: 10.09' tc. No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

SWJ

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: NMCB-10

Inspector(s): B Giles / D. Balmer Date/Time: 8/28/12 1205

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy cool ~50°F fog

	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 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: strong 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 0.21'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards - 2 (1 other down)	☒	☐

16. Previous well depth: 17.01'. Current well depth: 17.02'.

17. Depth to water: 11.39' tc. DTP - 11.18' tc. Thickness - 0.21 ft.

18. PID reading at wellhead: 344 ppm Breathing Zone: 0.1 ppm

Additional notes: Sock in well

SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: NMCB-11

Inspector(s): B Giles / D. Balmer Date/Time: 8/28/12 1105

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool

	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 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? 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: hydrocarbon odor in well	☒	☐
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: Bollards - 3	☒	☐

16. Previous well depth: 18.79'. Current well depth: 18.77'.

17. Depth to water: 9.88' TC DTP - 9.87' TC

18. PID reading at wellhead: 9.3 ppm Breathing Zone: 0.0 ppm

Additional notes:

SIW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Sample Location: NMCB-11

Inspector(s): BGiles / DBalmer Date/Time: 8/29/12 1400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: p. cloudy, mild, breezy ~50° F SW

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 9.61' Trace product

Total Depth of Well Below Top of Casing (feet): 18.77'

Purge Method: Low flow peristaltic Intake at 14.4'

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 g Gallons in Well: 1.47

Three Times Casing Volume: 4.4 g Gallons Purged from Well: 3.0 g

Water Sample Data

Sample Number: NMCB-11-2012 [w/ MS/MSD for select parameters SW

Time Sample Collected: 1445

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	1420	6.34	4.38	13.3	0.14	7.85	0.2	-39
.5	1424	6.38	5.31	5.7	0.00	7.54	0.3	-48
1.0	1428	6.43	6.96	2.2	0.00	7.40	0.4	-57
1.5	1432	6.48	7.91	0.0	0.00	7.30	0.4	-62
2.0	1436	6.51	8.31	0.0	0.00	7.28	0.4	-64
2.5	1440	6.52	8.37	0.0	0.00	7.25	0.4	-67
3.0	1444	6.53	8.32	0.0	0.00	7.29	0.4	-69

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

Screen 7.5 - 17.5 bgs
10.0 - 20' bc
Sat. 10' - 18.8'
Intake 14.4' bc

✓ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: NMCB-12

Inspector(s): B Giles / D. Balmer Date/Time: 8/28/12 1048

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, mild, ~50°F SLW

	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 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: slight petroleum odor on probe	☒	☒ (DKB) 8/28/12
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: Bollards - 4	☒	☐

16. Previous well depth: 20.39'. Current well depth: 20.40'.

17. Depth to water: 14.54' tc (DKB) 8/28/12 No product

18. PID reading at wellhead: 1.4 Breathing Zone: 0.0

Additional notes:

SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Sample Location: NMCB-12

Inspector(s): BGiles / D. Balmer Date/Time: 8/29/12 1300

Company: Sealaska Environmental Services, LLC

Weather/Temperature: p. cloudy, breezy, cool ~50° F (est)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 14.50' tc

Total Depth of Well Below Top of Casing (feet): 20.4'

Purge Method: Low flow peristaltic Intake at 17.45'

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.9'

Gallons per Foot: 0.16 g Gallons in Well: 0.94

Three Times Casing Volume: 2.83 g Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: NMCB-12-2012

Time Sample Collected: 1335

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	1319	6.46	0.664	0.53	7.69	~~8.00~~ 7.49	0.0	-65
~~5~~	1322					7.49		
0.5	1322	6.51	0.672	14.5	0.00	7.25	0.0	-71
1.0	1326	6.52	0.628	15.0	0.00	7.00	0.0	-72
1.5	1330	6.54	0.623	14.7	0.00	6.99	0.0	-72
2.0	1334	6.54	0.620	13.9	0.00	7.00	0.0	-72

BG 8/29/12

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Screen - TC 17.85
10 - 20' tc.
14.5 - 20.4'
intake at 17.45

Well Casing Volumes

GAL/FOOT ¼" = 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

Seep and Shoreline
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Well No.: NA

Inspector(s): B Liles / D Balmer Date/Time: 8/29/12 0745

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, foggy, cool, breezy. ~50° F

		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? sparsely in places	☒	☐
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.	☒	☐

Scrap metal, wood, concrete pieces and rebar observed in places in riprap, not a source of petroleum contamination.

Additional Notes: Two culvert pipes observed (18-in diam & 12-in diam) passing through riprap, probably stormwater. Neither was flowing.

√ JW

Sediment Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: NMCB Sample No.: NL-05S-2012 [10:30]

Inspector(s): John Highstone, Sherri Wunderlich Date/Time: 8/29/12 10:00

Company: Sealaska Environmental Services, LLC

Weather/Temperature: partly sunny, light wind, 50° F

		Yes	No
1.	Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☐	☒

Dark brown sediment - slightly silty, fine to coarse sand w/ scattered fine gravel. Contains 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 is nearby	☒	☐
6.	Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?	☐	☒

Additional Notes:

Garmin GPS Map 62S (unit used by Denali for well decommissioning project):

N 51.86024°

W 176.64827°

Sample NL-05S-2012 (w/ MS/MSD for select parameters) collected at 10:30

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: ROICC Well No.: 08-175

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/7/12 1045

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°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" 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: (steel) NA (no bollards) (GW)	☒	☒
16. Previous well depth: 11.11 ft btoc (7/9/12). Current well depth: 11.05 ftbtoc		
17. Depth to water: 3.38 ftbtoc		
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm		

Additional notes: _____

MW 9/7/12

✓ JKW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: ROICC Sample Location: 08-175

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/7/12 1045

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, overcast, light mist

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 3.38

Total Depth of Well Below Top of Casing (feet): 11.11 (2010) 11.05 (Hard bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.73 (2010 DTB used)

Gallons per Foot: 0.16 Gallons in Well: 1.24

Three Times Casing Volume: 3.71 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 08-175-2012

Time Sample Collected: 1115

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): odorless; clear water, light orange particle seen 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	1058	6.48	0.882	11	0.25	8.33	0.0	-82
.5	1102	6.44	0.897	7	0.00	8.20	0.0	-84
1.0	1106	6.43	0.903	6	0.00	8.17	0.0	-87
1.5	1110	6.42	0.904	5	0.00	8.15	0.0	-89

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: ROICC Well No.: 08-20D

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/7/12 1000

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 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" 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? 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: 15.98 ft btoc (2010) Current well depth: 16.16 ft btoc (Hard bottom)

17. Depth to water: 4.08 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: During DTB measurement, probe was catching on bottom of well screen.

JSW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: ROICC Sample Location: 08-200

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/7/12 1000

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 4.08

Total Depth of Well Below Top of Casing (feet): 15.98 (2010) 16.16 (Hard bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 11.90 (2010 DTB used)

Gallons per Foot: 0.16 Gallons in Well: 1.90

Three Times Casing Volume: 5.71 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 08-200-2012

Time Sample Collected: 1030

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): Clear, no odors

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	1010	6.49	1.76	Ø	0.34	8.52	0.1	-108
1.5	1014	6.50	1.77	Ø	0.00	8.44	0.1	-111
1.0	1018	6.52	1.76	Ø	0.00	8.40	0.1	-113
1.5	1022	6.52	1.76	Ø	0.00	8.37	0.1	-115

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: During DTB measurement, probe was catching on bottom of well screen.

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: 20ICC Well No.: 08-202

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/7/12 0910

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 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" 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: 3x Bollards	☒	☐

16. Previous well depth: 14.75 ft btoc (2010) Current well depth: 14.75 soft bottom

17. Depth to water: 2.74 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: ROICC Sample Location: 08-202

Inspector(s): A. Lewis, R. Bayci Date/Time: 9/7/12 0910

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 2.74

Total Depth of Well Below Top of Casing (feet): 14.75 (2010) 14.75 (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): 12.01 (2010 DTB used)

Gallons per Foot: 0.16 Gallons in Well: 1.92

Three Times Casing Volume: 5.76 Gallons Purged from Well: 6.5

Water Sample Data

Sample Number: 08-202-2012

Time Sample Collected: 0945

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): light yellow water, no odors or 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	0928	6.43	1.15	4	6.81	8.26	0.1	-102
.5	0932	6.55	1.16	5	0.00	7.84	0.1	-113
1.0	0936	6.57	1.15	4	0.00	7.79	0.1	-117
1.5	0940	6.58	1.14	4	0.00	7.77	0.1	-120

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Runway 5-23 Well No.: 14-100

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/12 1350

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: 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? 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? NM	☐	☒
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: 12.92 ft btoc (2012) Current well depth: 12.92 ft btoc (Hard bottom)

17. Depth to water: 2.56 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: _____

JSW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: Runway 5-23 Sample Location: 14-100

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/12 1350

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 2.56

Total Depth of Well Below Top of Casing (feet): 12.92 (2010) 12.92 (2012)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 10.36 (2010 DTB used)

Gallons per Foot: 0.16 Gallons in Well: 1.66

Three Times Casing Volume: 4.97 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 14-100-2012

Time Sample Collected: 1415

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear, no odors

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	6.41	0.485	19	0.51	9.37	0.0	-61
1.5	1404	6.40	0.481	19	0.00	9.02	0.0	-65
1.0	1408	6.40	0.482	18	0.00	8.99	0.0	-68
1.5	1412	6.39	0.488	18	0.00	8.97	0.0	-70

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Runway 5-23 Well No.: 14-110

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/12 1430

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: 1.5" 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? NA	☐	☒
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: 11.36 ft btoc (2010) Current well depth: 11.37 ft btoc

17. Depth to water: 2.78 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Well surrounded by surface water. See photo

√ = ok

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: Runway 5-23 Sample Location: 14-110

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/12 1430

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, overcast

Well Data

Diameter of Well Casing: 1.5"

Depth to Water Below Top of Casing (feet): 2.78

Total Depth of Well Below Top of Casing (feet): 11.36 (2010) 11.37 (2012)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.58 (2010 DTB used)

Gallons per Foot: 0.10 Gallons in Well: 0.86

Three Times Casing Volume: 2.57 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 14-110-2012

Time Sample Collected: 1510

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear water, No odors

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	1441	6.32	0.395	Ø	0.65	10.22	0.0	-50
.5	1445	6.29	0.451	Ø	0.00	10.20	0.0	-59
1.0	1449	6.29	0.468	Ø	0.00	10.17	0.0	-65
1.5	1453	6.30	0.473	Ø	0.00	10.15	0.0	-66
2.0	1457	6.30	0.474	1	0.00	10.16	0.0	-69

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Well surrounded by surface water. See photo.

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 78' Well No.: 12-145

Inspector(s): B Giles | D Balmer Date/Time: 8/31/12 1130

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, foggy, windy, cold ~50° F 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-in 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 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: Bollards - 3	☒	☐

16. Previous well depth: 30.63' Current well depth: 30.62' tc

17. Depth to water: 24.49' tc No product

18. PID reading at wellhead: 14.2 ppm Breathing Zone: 0.0

Additional notes:

Screen 18.0 - 28.0 gs
Screen 21.0 - 30.6 tc
Sat screen 24.5 - 30.6 tc
Intake - 27.6' tc

✓ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 78 Sample Location: 12-145

Inspector(s): B Giles / D Balmer Date/Time: 8/31/12 1130

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, foggy, windy, cold ~50° F (SW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 24.49' tc

Total Depth of Well Below Top of Casing (feet): 30.63' tc (2010)

Purge Method: Low flow peristaltic Set intake 27.6' tc

Calculate if well parameters do not stabilize per the work plan: (using 2010 Data Report Memo)

Length of Water Column in Well (feet): 6.14'

Gallons per Foot: 0.16 g Gallons in Well: 0.98 g

Three Times Casing Volume: 2.95 g Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: 12-145-2012

Time Sample Collected: 1230

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): 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	1156	6.01	0.383	36.5	0.19	7.20	0.0	1
1.5	1201	6.14	0.336	50.2	0.00	7.09	0.0	-30
1.0	1206	6.21	0.352	49.8	0.00	7.12	0.0	-40
1.5	1211	6.27	0.359	97.6	0.00	7.19	0.0	-45
2.0	1216	6.29	0.358	126.0	0.00	7.19	0.0	-46
2.5	1221	6.27	0.359	51.0	0.00	7.40	0.0	-46
3.0	1226	6.28	0.342	50.6	0.00	7.78	0.0	-46

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 78 Well No.: 12-801

Inspector(s): B Giles / D Balmer Date/Time: 8/31/12

Company: Sealaska Environmental Services, LLC

Weather/Temperature: overcast, foggy, windy, cold ~50° F 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-in 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: Bollards - 3	☒	☐

16. Previous well depth: 15.59. Current well depth: 15.59.

17. Depth to water: 3.22' to No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 78 Well No.: 12-802

Inspector(s): B Giles / D. Balmer Date/Time: 8/31/12 1520

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain, cloudy, windy, cold ~50° F 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-in 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: Bollards - 3	☒	☐

16. Previous well depth: 10.20' . Current well depth: 10.39' .

17. Depth to water: 2.84' tc No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen 2.0' - 7.0' gs
" 5.0' - 10' tc
Intake 7.5' tc.

✓ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 78 Sample Location: 12-802

Inspector(s): B Giles / D Balmer Date/Time: 8/31/12 1510

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain, wind, cold ~50°F (SW)

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 2.84'

Total Depth of Well Below Top of Casing (feet): 10.2' in 2010 (SW)

Purge Method: low flow peristaltic Intake set at 7.5' tc

Calculate if well parameters do not stabilize per the work plan: (using 2010 DTB) (SW)

Length of Water Column in Well (feet): 7.36'

Gallons per Foot: 0.16 g Gallons in Well: 1.18 g

Three Times Casing Volume: 3.53 g Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: 12-802-2012

Time Sample Collected: 1615

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	1542	6.07	0.472	0.0	0.35	8.88	0.0	193
.5	1547	6.19	0.372	0.0	2.97	9.02	0.0	191
1.0	1552	6.24	0.377	0.0	2.33	8.76	0.0	191
1.5	1557	6.24	0.390	0.0	0.65	8.61	0.0	192
2.0	1602	6.24	0.399	0.0	0.00	8.47	0.0	193
2.5	1607	6.26	0.404	0.0	0.00	8.53	0.0	193
3.0	1612	6.27	0.406	0.0	0.00	8.56	0.0	194

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 78' Well No.: MW-116

Inspector(s): B Giles / D Belmer Date/Time: 8/31/12 1010

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, foggy, mist, windy ~50° F (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? 2-in butterfly	☒	☐
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? Very 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA (SW)	☐	☒

16. Previous well depth: 22.16 . Current well depth: 22.16' tc .

17. Depth to water: 14.19' No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen 11-21.9'
" 13-23' tc
Sat screen 14.2-22.2'
Intake at 18.2' tc

✓ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 78 Sample Location: MW-116

Inspector(s): B Giles / D Balmer Date/Time: 8/31/12 1010

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, misty, windy, cold ~50°F SW

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 14.19'

Total Depth of Well Below Top of Casing (feet): 22.16' (2010) (also 2012)

Purge Method: Low flow peristaltic Intake set at 18.2' ft

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 g Gallons in Well: 1.28 g

Three Times Casing Volume: 3.83 g Gallons Purged from Well: 4.0

Water Sample Data

Sample Number: MW-116-2012

Time Sample Collected: 1115

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): NA SW

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	1041	5.66	0.394	0.0	5.35	6.42	0.0	240
.5	1045	5.72	0.326	0.0	6.78	5.81	0.0	245
1.0	1049	5.56	0.315	0.0	5.76	5.73	0.0	259
1.5	1053	5.38	0.303	0.0	4.49	5.70	0.0	272
2.0	1057	5.22	0.290	0.0	3.22	5.78	0.0	282
2.5	1101	5.16	0.280	1.6	2.74	5.77	0.0	288
3.0	1105	5.13	0.277	7.4	2.54	5.77	0.0	292
3.5	1109	5.14	0.275	10.6	2.51	5.83	0.0	294
4.0	1113	5.16	0.275	13.6	2.67	5.85	0.0	296

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 78 Well No.: MW-117

Inspector(s): B Coles / D Bednar Date/Time: 8/3/12 0840

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast, foggy, windy, cold ~50° F (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-in 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? 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 NA.		
14. Is the well depth consistent with past depth measurements?	☑	☐
15. Are there well protections? Type:	☐	☒

16. Previous well depth: 20.54' . Current well depth: 20.62' .

17. Depth to water: 14.25' tc No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

✓ SW

Seep and Shoreline
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 78 Old Transportation Bldg Well No.: 12-802

Inspector(s): B Gilas / D Balmer Date/Time: 8/31/12 0905

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast, foggy, windy, cold ~50° F (SW)

		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? Grasses, some flowering plants	☒	☐
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.	☒	☐

Occasional metal debris, not a source of petroleum contamination.

Additional Notes: No surface water/sediment sample collected. No evidence of petroleum contamination observed.

✓ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA-79 Well No.: 02-230

Inspector(s): A. Lewis / R Boyd Date/Time: 8/27/12 / 0945

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 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" 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? Surface Rust only	☒	☐
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: 18.90. Current well depth: 18.93.

17. Depth to water: 12.48

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

√ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA-79 Sample Location: 02-230

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/12 / 0945

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50° F, overcast

Well Data

Diameter of Well Casing: 2 inch

Depth to Water Below Top of Casing (feet): 12.48

Total Depth of Well Below Top of Casing (feet): 18.93

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.45

Gallons per Foot: 0.16 Gallons in Well: 1.03

Three Times Casing Volume: 3.10 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: 02-230-2012

Time Sample Collected: 1010

Sampling Method: low-flow

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	0947	6.11	0.701	11	1.34	7.31	0.0	-60
.5	0951	6.16	0.673	10	0.28	7.22	0.0	-64
1.0	0955	6.17	0.664	11	0.24	7.19	0.0	-68
1.5	0959	6.18	0.659	12	0.00	7.17	0.0	-71
2.0	1003	6.19	0.647	12	0.00	7.15	0.0	-74
2.5	1007	6.20	0.648	12	0.00	7.13	0.0	-79

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 79 Well No.: MRP-MW8

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/12 / 1055

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51° F, overcast, 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" Black 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? monument lid missing, lightly rusted	☒	☐
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: 16.06. Current well depth: RB 8/27/12 16.02 16.06

17. Depth to water: 11.21

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: _____

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA-79 Sample Location: MRP-MW8

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/12 1040

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°, rain, light wind

Well Data

Diameter of Well Casing: 2 inch

Depth to Water Below Top of Casing (feet): 11.21

Total Depth of Well Below Top of Casing (feet): 16.06

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4.85

Gallons per Foot: 0.16 Gallons in Well: 0.78

Three Times Casing Volume: 2.33 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: MRP-MW8-2012

Time Sample Collected: 1115

Sampling Method: low-flow peristaltic

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	1052	6.05	0.421	7	0.42	7.13	0.0	-48
1.5	1056	6.04	0.422	7	0.00	7.08	0.0	-55
1.0	1100	6.07	0.430	6	0.00	7.14	0.0	-66
1.5	1104	6.08	0.439	5	0.00	7.16	0.0	-68
2.0	1108	6.09	0.439	5	0.00	7.18	0.0	-71

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA-79 Well No.: ~~Nearby~~ SW Client 601

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/12 1340

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, overcast, 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: 3x bollards	☒	☐

16. Previous well depth: 17.98 btoc Current well depth: 18.02.

17. Depth to water: 11.68

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes:

✓ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA-79 Sample Location: 601

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/27/12 1330

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50° F, overcast, rain

Well Data

Diameter of Well Casing: 2 inch

Depth to Water Below Top of Casing (feet): 11.68

Total Depth of Well Below Top of Casing (feet): 18.02

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.3

Gallons per Foot: 0.16 Gallons in Well: 1.01

Three Times Casing Volume: 3.02 Gallons Purged from Well: 1.05

Water Sample Data

Sample Number: 601-2012

Time Sample Collected: 1415

Sampling Method: low-flow

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)
1353	initial	6.09	0.357	4	1.55	7.94	0.0	-33
1357	1.5	6.09	0.351	2	0.00	7.62	0.0	-43
1401	1.0	6.10	0.347	3	0.00	7.67	0.0	-47
1405	1.5	6.11	0.350	3	0.00	7.65	0.0	-50

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

Seep and Shoreline
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 78, Main Road Pipeline Well No.: NA

Inspector(s): B Giles / D Balmer Date/Time: 8/29/12 0745

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, mild, occas. drizzle ~50°F (C)

		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? kelp / rockweed	☒	☐
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: Rusty pipe sections, scrap metal debris, concrete pieces w/ rebar mesh in place, in rip rap. Not a source of petroleum contamination.

✓ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA80 Steamplant Well No.: 12-155

Inspector(s): A. Lewis, B. Boyd, J. Hightower Date/Time: 9/1/12 / 1625

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°, overcast, 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" Butterfly		
5. Specify size and number of bolts on flush-mount cap: 3x 9/16" bolts (stn. steel)		
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 NA.		
14. Is the well depth consistent with past depth measurements? Soft bottom	☒	~~☐~~ ☒ SLW 9/11/12
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 25.21. Current well depth: 25.41 ft btoc

17. Depth to water: 15.98 ft btoc

18. PID reading at wellhead: 8 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SAS/A Well No.: 04-157

Inspector(s): JOHN HIGHSTONE Date/Time: 9-1-12 / 1540

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 10 mph WIND, 50°

	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: MEDIUM PETROLEUM SMELL	☒	☐
10. Is there an oily sheen on the water? Sheen - Yes (SLI)	☒	☒ → 9/4 1.12
11. Is the well dry? (Can't gauge)	☐	☒
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 BALLARDS	☒	☐

16. Previous well depth: 22.36' TC. Current well depth: 22.21' TC.

17. Depth to water: 19.22' TC

18. PID reading at wellhead: 0.3 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING SOUTH

√ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA80 steamplant Well No.: CM-158

Inspector(s): A. Lewis, B. Boyd Date/Time: 9-1-12 / 1545

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°, moderate 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: 4" Butterfly		
5. Specify size and number of bolts on flush-mount cap: 7x 9/16" bolt		
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 NA.		
14. Is the well depth consistent with past depth measurements? Very soft bottom	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 28.64. Current well depth: 28.67 ft. btoc

17. Depth to water: 19.08 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Sucking well-removed

√ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 80, Steam Plant Sample Location: 04-158

Inspector(s): Probst Byd, Sherri A Woodrich Date/Time: 9/3/12 11:50

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50° F, raining, wind ~ 35 mph

Well Data

Diameter of Well Casing: 4"

Depth to Water Below Top of Casing (feet): 18.21

Total Depth of Well Below Top of Casing (feet): 28.07 ft btoc

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 9.86

Gallons per Foot: 0.65 Gallons in Well: 6.41

Three Times Casing Volume: 19.2 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: 04-158 - 2012

Time Sample Collected: 12:50

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): moderate odor - petroleum, sheen, brown/orange particulate

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	1226	6.06	0.483	49.3	1.13	7.85	0	-10
0.5	1230	6.05	0.453	51.1	0.00	7.95	0	-18
1.0	1234	6.03	0.445	50.7	0.00	7.99	0	-21
1.5	1238	6.02	0.448	72.3	0.00	7.95	0	-26
2.0	1242	6.03	0.457	68.8	0.00	7.98	0	-28
2.5	1246	6.03	0.462	70.6	0.00	7.94	0	-31

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 = 23.4 ppm

Top of casing cut at 45°, possibly allowing surface H2O into 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 80 STEAM PLANT Well No.: 04-159

Inspector(s): JOHN HIGHSTONE Date/Time: 9.1.12 / 1458

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 20 MPH WIND, 50°

	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		
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: 33.44' TC. Current well depth: 33.44 TC.

17. Depth to water: 23.21' TC

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING WEST

✓ SHW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA80, Steam Plant Sample Location: 04-159

Inspector(s): R Byrd, S. Wunderlich Date/Time: 9/3/12 0818

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, rain, heavy wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 23.20

Total Depth of Well Below Top of Casing (feet): 33.44

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 10.24

Gallons per Foot: 0.16 Gallons in Well: 1.64

Three Times Casing Volume: 4.92 Gallons Purged from Well: 5.125

Water Sample Data

Sample Number: 04-159-2012

Time Sample Collected: 1025

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): moderate petroleum odor, orange plug through tubing once pump started

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	0915	6.42	0.595	0	10.10	7.69	0	-99
0.25	0920	6.44	0.571	0	9.29	7.65	0	-101
0.50	0925	6.45	0.559	0	8.78	7.69	0	-102
0.75	0930	6.46	0.548	0	8.22	7.77	0	-102
1.00	0935	6.46	0.540	0	7.78	7.79	0	-103
1.25	0940	6.47	0.534	0	7.24	7.85	0	-104
1.50	0945	6.48	0.526	0	6.87	7.87	0	-105
1.75	0950	6.48	0.522	0	6.38	7.87	0	-104
2.00	0955	6.48	0.517	0	6.05	7.94	0	-105
2.625	1000	6.49	0.509	17.0	5.30	6.69	0	-105
3.125	1004	6.50	0.501	18.2	4.89	6.65	0	-105

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 0.0 ppm

After 0955 reading, increased flow rate to 0.5 L/min

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

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 80, Steam Plant Sample Location: OU-159

Inspector(s): _____ Date/Time: _____

Company: Sealaska Environmental Services, LLC

Weather/Temperature: _____

Well Data

Diameter of Well Casing: _____

Depth to Water Below Top of Casing (feet): _____

Total Depth of Well Below Top of Casing (feet): _____

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: _____

SEE PAGE 1 of 2

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)
3.625	1008	6.50	0.497	19.3	3.97	6.69	0	-105
4.125	1012	6.50	0.490	19.0	3.49	6.69	0	-106
4.625	1016	6.50	0.487	13.3	3.10	6.73	0	-106
5.125	1020	6.51	0.480	16.0	1.70	6.73	0	-107

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

VSW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SASO STEAM PLANT Well No.: 04-164

Inspector(s): JOHN HIGHSTONE Date/Time: 9.1.12/1510

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 10 MPH WINDS, 50°

	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 SLIP		
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? CONCRETE CRACKED AT 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 N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 BALLARDS	☒	☐

16. Previous well depth: 32.17' TC. Current well depth: 32.17' TC.

17. Depth to water: 21.83' TC

18. PID reading at wellhead: 0.3 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING SOUTH

✓ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA80 Steamplant Well No.: 04-173

Inspector(s): A. Lewis, B. Boyd Date/Time: 9/1/12 | 1600

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°, Overcast w. thfog, moderate 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: 6" Bathtiffy		
5. Specify size and number of bolts on flush-mount cap: 2 x 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: 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? Sheen only Less than 001	☐	☒
13. If so, product thickness Sheen.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 26.45. Current well depth: 26.48 ft. btoc

17. Depth to water: 14.60 ft btoc

18. PID reading at wellhead: 2.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Removed Sock, 2x stripped bolts, soft bottom

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA80, Steam Plant Sample Location: 04-173

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/4/12 0815

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, heavy wind, rain

Well Data

Diameter of Well Casing: 6"

Depth to Water Below Top of Casing (feet): 14.43

Total Depth of Well Below Top of Casing (feet): ~~26.45 (2010)~~, 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): ~~12.03~~ 12.05

Gallons per Foot: 1.46 Gallons in Well: ~~17.56~~ 17.59

Three Times Casing Volume: ~~52.69~~ 53.78 Gallons Purged from Well: 2.5 ~~+1.0 pounds~~

Water Sample Data

Sample Number: 04-173-2012

Time Sample Collected: 0900

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): moderate 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	0844	6.13	0.414	8	0.09	6.05	0.0	-28
1.5	0848	6.17	0.413	9	0.00	6.06	0.0	-36
2.0	0852	6.19	0.410	8	0.00	6.02	0.0	-42
2.5	0856	6.19	0.409	9	0.00	6.05	0.0	-45

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Black particulate seen at initial, allowed to purge ≈ 1 gallons prior to connecting to flow cell. Start pump at 0834. Fine black particulate seen throughout sample and at time of sample.

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

VSLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SAD. STEAMPLANT Well No.: 04-801

Inspector(s): JOHN HEIGHSTONE Date/Time: 9.1.12 / 400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 20 MPH WIND, 48°

	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 BALLARD	☒	☐

16. Previous well depth: 27.69' TC. Current well depth: 27.85' TC.

17. Depth to water: 21.32' TC

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SILT BOTTOM

1 PICTURE FACING EAST

✓ SIW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SE Pt. Steam Plant Sample Location: 04-801

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/4/12 0935

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, moderate wind, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 21.21

Total Depth of Well Below Top of Casing (feet): 27.85

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.64

Gallons per Foot: 0.16 Gallons in Well: 1.06

Three Times Casing Volume: 3.19 Gallons Purged from Well: 3.5

Water Sample Data

Sample Number: 04-801-2012

Time Sample Collected: ~~04-SE09~~ 9/4/12 1015

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): 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	0944	5.81	0.241	4	6.05	6.32	0.0	106
.5	0948	5.68	0.240	11	5.94	6.17	0.0	137
1.0	0952	5.64	0.239	14	5.80	6.13	0.0	167
1.5	0956	5.62	0.238	16	5.85	6.15	0.0	184
2.0	1000	5.64	0.238	15	5.92	6.17	0.0	194
2.5	1004	5.63	0.238	17	5.97	6.15	0.0	204
3.0	1008	5.62	0.239	19	6.04	6.18	0.0	211
3.5	1012	5.63	0.239	22	6.07	6.14	0.0	219

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

vslw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA80 STEAM PLANT Well No.: SP4-2

Inspector(s): JOHN HIGHSTONE Date/Time: 9.1.12 / 1607

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 15 MPH WIND, 50°

	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) 9/16" BOLTS - 1 MISSING		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? MONUMENT LID 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 N/A		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 25.29' TC. Current well depth: 25.30 TC.

17. Depth to water: 14.34' TC

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING EAST

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SASO STEAM PLANT Well No.: SP4-3

Inspector(s): JOHN HIGHSTONE Date/Time: 9-1-12 / 1522

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 10 MPH WIND, 50°

	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		
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: 28.03' TC. Current well depth: 28.04' TC.

17. Depth to water: 20.03' TC

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING EAST

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SA 80, Steam Plant Sample Location: SP4-3

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/4/12 1055

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, moderate wind, rain

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 19.96

Total Depth of Well Below Top of Casing (feet): 28.04

Purge Method: low-flow peristaltic

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: 4.0

Water Sample Data

Sample Number: SP4-3-2012

Time Sample Collected: 1145

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): Clear odorless water

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	1108	6.20	0.424	39	0.69	6.15	0.0	-44
.5	1112	6.25	0.444	44	0.00	6.14	0.0	-52
1.0	1116	6.25	0.466	49	0.00	6.15	0.0	-54
1.5	1120	6.26	0.478	47	0.00	6.14	0.0	-57
2.0	1124	6.27	0.482	61	0.00	6.11	0.0	-61
2.5	1128	6.28	0.483	85	0.00	6.14	0.0	-61
3.0	1132	6.28	0.483	120	0.00	6.17	0.0	-61
3.5	1136	6.29	0.483	121	0.00	6.20	0.0	-62
4.0	1140	6.30	0.481	124	0.00	6.24	0.0	-63

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: NTUs rose but water was clear throughout as seen in previous sampling events

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18/36 Well No.: 02-231

Inspector(s): B. Giles / D. Balmer Date/Time: 8/27/12 0915

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, mild, calm ~50° F (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? lid off & broken	☐	☒
4. Specify type of cap: 2-in butterly - on well		
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? broken - blown off	☐	☒
7. Is the monument in good condition? ring collar 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards - 3	☒	☐

16. Previous well depth: 18.68' . Current well depth: 18.55' sc ft

17. Depth to water: 14.59' tc

18. PID reading at wellhead: 0.2 Breathing Zone: 0.0

Additional notes:

Bollards - 3

Screen 9.25 - 19.25 bgs
12.25' - 18.7' tc
water - 14.6' - 18.7' tc
Intake - 16.6' tc

✓SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18/36 Sample Location: 02-231

Inspector(s): B Giles / D. Balmer Date/Time: 8/27/12 0910

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, mild, calm, lt rain ~50° F (slw)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 14.59

Total Depth of Well Below Top of Casing (feet): 18.55' tc (12.68' tc in 2011)

Purge Method: low flow peristaltic Intake at 16.6 ft

Calculate if well parameters do not stabilize per the work plan: (using 2011 DTB) (slw)

Length of Water Column in Well (feet): 4.1'

Gallons per Foot: 0.16 Gallons in Well: 0.66 g.

Three Times Casing Volume: ~~3.0~~ g. 1.96 Gallons Purged from Well: 1.98

(DKB) 8/27/12

Water Sample Data

Sample Number: 02-231-2012 and 02-241-2012 (duplicate)

Time Sample Collected: 1024 and 1634

Sampling Method: low flow peristaltic

Remarks (Color/Odor): Rotten odor to 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	0958	5.79	0.994	54.6	6.15	6.94	0.0	-114
.33	1002	5.99	0.964	54.6	0.00	6.85	0.0	-132
.66	1006	5.97	0.959	50.4	0.00	6.78	0.0	-136
.99	1010	5.99	0.958	41.1	0.00	6.70	0.0	-139
1.32	1014	6.01	0.958	37.0	0.00	6.67	0.0	-143
1.65	1018	6.06	0.952	28.8	0.00	6.66	0.0	-147
1.98	1022	6.07	0.950	12.7	0.00	6.67	0.0	-149

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Well did not stabilize (slw)

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

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18/36 Sample Location: 02-231

Inspector(s): Bailes ID Balner Date/Time: 9/8/12 0935

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, rain, breezy, cold ~50° F (SW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 14.30'

Total Depth of Well Below Top of Casing (feet): 18.55' (2012)

Purge Method: Low flow peristaltic Intake at 16.5' bc

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4.25

Gallons per Foot: 0.16 g Gallons in Well: 0.68 g

Three Times Casing Volume: 2.04 g Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: 02-231R-2012

Time Sample Collected: 1035

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): Rotten odor in 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	0955	6.31	0.558	34.9	1.06	7.10	0.0	-24
.5	1000	6.11	0.557	31.5	0.02	6.68	0.0	-33
1.0	1005	6.06	0.555	42.1	0.13	6.63	0.0	-47
1.5	1010	6.06	0.556	31.8	0.30	6.64	0.0	-50
2.0	1015	6.07	0.557	30.5	0.07	6.63	0.0	-54
2.5	1020	6.08	0.556	46.0	6.00	6.58	0.0	-56
~~3.0~~	~~1025~~	BG 9/8/12						

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Sample recollected for PAHs due to missed extraction holding time by lab (SW)

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18/36 Well No.: 02-232

Inspector(s): B. Giles / D. Balmer Date/Time: 8/27/12 1130

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, lt. rain ~50° F (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-in butterfly & lock		
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: Bollards - 3	☒	☐

16. Previous well depth: 24.73' . Current well depth: 24.74' .

17. Depth to water: 17.40' tc.

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes:

Screen 12 - 22' bgs
15 - 24.7' tc.
water 17.4 - 24.7'
Interface - 21.0' tc.

✓ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18/36 Sample Location: 02-232

Inspector(s): B GILES/D. BAMER Date/Time: 8/27/12 1130

Company: Sealaska Environmental Services, LLC

Weather/Temperature: CLOUDY, COOL, LIGHT RAIN ~50° F (SW)

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 17.40'

Total Depth of Well Below Top of Casing (feet): 24.73' in 2011, 24.74' in 2012 (SW)

Purge Method: LOW-FLOW PERISTALTIC Intake at 21.0 ft.

Calculate if well parameters do not stabilize per the work plan: (using 2011 DTB) (SW)

Length of Water Column in Well (feet): ~~7.23~~ 7.33 SW 8/27/12

Gallons per Foot: 0.16 Gallons in Well: 1.17

Three Times Casing Volume: 3.52 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 02-232-2012

Time Sample Collected: 1535

Sampling Method: LOW-FLOW PERISTALTIC

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	1515	6.19	0.818	30.2	0.00	6.92	0.0	-96
.5	1519	6.22	0.823	40.1	0.00	6.99	0.0	-98
1.0	1523	6.23	0.832	58.2	0.00	6.92	0.0	-99
1.5	1527	6.23	0.820	57.7	0.00	6.93	0.0	-100
2.0	1531	6.24	0.815	61.5	0.00	6.95	0.0	-102

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: BEGAN AT 1130 BUT TWO METERS USED WOULD NOT ACCURATELY MEASURE ~~STABILIZE~~ CONDUCTIVITY (ALWAYS SAME READING) SW 8/27/12 (SW) FUNCTIONING HORIBA USED FOR MEASUREMENTS LISTED ABOVE

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

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18/36 Sample Location: 02-232

Inspector(s): B Giles / D. Balma Date/Time: 9/7/12 1500

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, mist, breezy, cold ~50° F (SW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 16.33' tc.

Total Depth of Well Below Top of Casing (feet): 24.74' (2012)

Purge Method: Low flow peristaltic Intake at 20.5' tc

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.41'

Gallons per Foot: 0.16 Gallons in Well: 1.35 g

Three Times Casing Volume: 4.03 g Gallons Purged from Well: 1.5

Screen - 12-22' gs
15-24.7' tc
Sat Screen 16.3-24.7'
Intake - 20.5

Water Sample Data

Sample Number: 02-232R-2012

Time Sample Collected: 1545

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	1526	6.41	0.789	0.0	1.65	7.12	0.0	-83
.5	1531	6.45	0.824	0.0	0.00	6.95	0.0	-102
1.0	1536	6.45	0.809	0.0	0.00	6.93	0.0	-106
1.5	1541	6.45	0.805	0.0	0.00	6.89	0.0	-108

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Repeat Sampling for PAHs due to lab holding time error.

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: 02-518

Inspector(s): JOHN HIGHSTONE Date/Time: 8-27-12 / 0925

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, WIND 5 mph / 48°

	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" SCREW 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: N/A	☐	☒

16. Previous well depth: 11.03. Current well depth: 11.03.

17. Depth to water: 6.46

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING EAST

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: 18/36-02

Inspector(s): JOHN HIGHSTONE Date/Time: 8 27 12 / 1553

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, LIGHT RAIN, 5 MPH WIND, 50°

	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: 21.07. Current well depth: 21.05.

17. Depth to water: 17.79

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING SOUTH

√ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18/36 Well No.: AS-1

Inspector(s): B. Giles / D. Bahme Date/Time: 8/27/12 1600

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, ~50° F (SLW)

	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: Flush Mount, 2-in slip cap		
5. Specify size and number of bolts on flush-mount cap: 3 - 9/16 in 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	☐	☒
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: 29.31. Current well depth: 29.25'.

17. Depth to water: 13.71 ft.

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes:

Screen 24.6 - 29.6

Mid point - 27.0' tc.

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18/36 Sample Location: AS-1

Inspector(s): B Giles | D. Balmer Date/Time: 8/27/12 1600

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, ~50° F GW

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 13.71 ft.

Total Depth of Well Below Top of Casing (feet): 29.31 in 2011, 29.35 on 8/27/12 (-SW)

Purge Method: low flow peristaltic. Intake set at 27.0 ft.

Calculate if well parameters do not stabilize per the work plan: (using 20:1 DTB) (-SW)

Length of Water Column in Well (feet): 15.6

Gallons per Foot: 0.16 Gallons in Well: 2.496

Three Times Casing Volume: 7.49 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: AS-1-2012

Time Sample Collected: 1705

Sampling Method: low flow peristaltic

Remarks (Color/Odor): CLEAR, NO 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	1650	6.48	0.647	12.9	0.00	6.84	0.0	-113
1.5	1653	6.37	0.664	28.6	0.00	6.83	0.0	-107
1.0	1658	6.29	0.666	26.5	0.00	6.90	0.0	-103
1.5	1653	6.27	0.665	32.4	0.00	7.03	0.0	-102
2.0	1658	6.25	0.665	33.1	0.00	6.99	0.0	-101
2.5	1703	6.26	0.666	33.7	0.00	7.04	0.0	-102

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

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18/36 Sample Location: AS-1

Inspector(s): B Giles / D Bulmer Date/Time: 9/8/12 0815

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Cloudy, calm (temperarily), drizzle, cold ~50°F (2)

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 13.59' tc

Total Depth of Well Below Top of Casing (feet): 29.25' tc (2012)

Purge Method: Low flow peristaltic Intake at 27.0' tc

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 15.66'

Gallons per Foot: 0.16 g Gallons in Well: 2.51

Three Times Casing Volume: 7.52 g Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: AS-1R-2012

Time Sample Collected: 0905

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	0840	6.13	0.735	56.5	0.46	6.82	0.0	-40
.5	0845	6.37	0.678	56.0	0.00	6.44	0.0	-91
1.0	0850	6.37	0.666	58.0	0.00	6.41	0.0	-100
1.5	0855	6.37	0.662	56.3	0.00	6.36	0.0	-104
2.0	0900	6.38	0.662	60.3	0.00	6.36	0.0	-107

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Well cannot be used for product monitoring.

Sample recollected for PAHs due to missed extraction holding time by lab (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

✓ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: E-207

Inspector(s): JOHN HIGHSTONE Date/Time: 5.27.12 / 1325

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 5 MPH WIND, 50°

	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 PETROLEUM 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 N/A.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 17.56. Current well depth: 17.54.

17. Depth to water: 10.04

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM, REMOVED ABSORBENT SOCK
1 PICTURE FACING NORTH

√ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: E-209

Inspector(s): JOHN HIGHSTONE Date/Time: 8.27.12/0949

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, WIND 5 mph, 48°

	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 PETROLEUM ODOR	☒	☐
10. Is there an oily sheen on the water? LESS THAN .01	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well?	☒	☐
13. If so, product thickness LESS THAN .01, LIGHT SHEEN		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A GW	☐	☒

16. Previous well depth: 15.81. Current well depth: 15.65.

17. Depth to water: 10.63

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOCK BOTTOM, REMOVED ABSORBENT SOCK.
1- PICTURE FACING NORTH

√ SIW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: E-213

Inspector(s): JH ~~OVERCAST, RAIN, 5 MPH JH~~ JOHN HIGHSTONE 8-27-12 8-27-12 Date/Time: 8.27.12/1050

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 5 MPH WIND, 48°

	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: 18.20. Current well depth: 18.10.

17. Depth to water: 11.28

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1- PICTURE FACING WEST

√ SLJ

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18/36 Well No.: E-216

Inspector(s): JOHN NIGHSTONE Date/Time: 8.27.12 / 1527

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, LIGHT RAIN, 5 MPH VAR. NE, 50°

	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" BUTTERLN		
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: MEDIUM PETROLEUM 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 .43'.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 22.65'. Current well depth: 22.75'.

17. Depth to water: 16.87'

18. PID reading at wellhead: 0.1 Breathing Zone: 0.0

Additional notes: HARD BOTTOM, REMOVED ABSORBENT SOCK
1 PICTURE FACING SOUTH
DTP - 16.44

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: E-217

Inspector(s): JOHN HIGHSTONE Date/Time: 8-27-12 / 11:22

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 5 MPH WIND, 48°

	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		
5. Specify size and number of bolts on flush-mount cap: N/A (SU)		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? CONCRETE 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 N/A		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 22.18 . Current well depth: 22.38 .

17. Depth to water: 15.62

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING NORTH

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: BW-18/36-02

Inspector(s): JOHN HIGHSTONE Date/Time: 8.27.12/1344

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 5 MPH WIND, 50°

	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 EA 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: 20.07 ft. Current well depth: 20.04.

17. Depth to water: 4.21

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING NORTH

√ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: RW-18/36-04

Inspector(s): JOHN HIGHSTONE Date/Time: 8.27.12 / 1410

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 5 MPH WIND, 50°

	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 EA 3/4" BOLTS - STRIPPED OUT		
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... MEDIUM PETROLEUM 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 .06.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 27.15. Current well depth: 27.16.

17. Depth to water: 13.93

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 - PICTURE FACING NORTH

DTP - 13.77

√ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18 36 Well No.: PW-18/36-05

Inspector(s): JOHN HICKSTONE Date/Time: 8·27·12/1034

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 5 MPH WIND, 48°

	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 BALLARDS	☒	☐

16. Previous well depth: 19.32. Current well depth: 19.48.

17. Depth to water: 9.36

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING WEST

√ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: Z3-2

Inspector(s): JOHN HIGHSTONE Date/Time: 8-27-12/1305

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 5 mph WIND, 50°

	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		
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: 12.56. Current well depth: 12.46.

17. Depth to water: 10.29

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM, REMOVED ABSORBENT SOCK
1 PICTURE FACING EAST

√ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: 23-6

Inspector(s): JOHN HIGHSTONE Date/Time: 8.27.12 / 1022

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, LIGHT RAIN, 5 MPH, WIND ~50°F (SL)

	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: 1/4		
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: 10.90. Current well depth: 10.71.

17. Depth to water: 7.68

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1- PICTURE FACING SOUTH

✓ sh

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SOUTH OF RUNWAY 18-36 Well No.: Z4-2

Inspector(s): JOHN HIGHSTONE Date/Time: 8.27.12/1103

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 5 MPH WIND, 48°

	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		
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: 14.50. Current well depth: 14.49.

17. Depth to water: 12.62

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM, CASING LEANING EAST
1 - PICTURE FACING NORTH

1

✓ SLW

Seep and Shoreline
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18/36 Well No.: NA

Inspector(s): B. Giles / D Balmer Date/Time: 8/28/12 0820

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, mild. ~50° F (SW)

		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. One small area of petroleum stained rock (4'x2') on shore near upper bridge. Several extensive areas of the shoreline north of the upper bridge contain black-stained sediment just beneath the surface, which creates sheen when disturbed in water.	☒	☐
7.	Is there vegetation growing on the shoreline? Grasses and rockweed	☒	☐
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.	☒	☐

Scattered metal debris, cables, metal siding, observed along shoreline, not sources of petroleum contamination.

Additional Notes: Large pieces of concrete with rebar were present in areas of former bridges.

/SLW

Sediment Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18-36 RB Sample No.: NSWSD-25-2012 [1030] Dup: NSWSD-125-2012 [1040]

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/12 1025

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53° F, overcast

		Yes	No
1.	Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☒	☐

Sandy sediment, Black, seaweed along surface of sediment

2.	Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☒	☐

Moderate smell of petroleum

3.	Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒

None

4.	Is there a petroleum sheen or color change on the surface water or sediment after it was disturbed?....	☒	☐

light sheen seen access sediment ¼" Below surface, sheen seen on water after sampling was complete

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?.....	☒	☐

Eagles along shoreline, 50 Ft down stream, salmon seen swimming by

Additional Notes:

Dup for DRO only

√ SWJ

Sediment Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18-36 Sample No.: NSWSD-45-2012 [1000] Dup: NSWSD-145-2012 [1010]

Inspector(s): A Lewis, R Boyd Date/Time: 8/27/12 0955

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53° F, overcast

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☐	☑

Sediment was grey in color, small grain sand, no organic matter on sediment at sample location, seaweed observed near location

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☐	☒

No odors

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☑	☐

Sample location is located between two creosote piling running accross water

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? Grass along shoreline, healthy	☑	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☐	☒

Additional Notes: Dup for PAHs only

/ 3W

Sediment Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18-36 Sample No.: NSWSD-SS-2012[0910]

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/12 0900

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 54°F, overcast

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☒	☐

Black sediment, loose sediment with 1/4"-1/2" rocks
light seaweed along surface

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☒	☐

Heavy petroleum odor

3. Is there manmade debris within 200 feet of the sampling location that could affect sample results?	☐	☒

Piping along shoreline (dead end open) w/no free flowing water - low likelihood of contributing to petroleum contamination. Piping on vessel over water - 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?....	☒	☐

Sheen (heavy) observed after sample collection

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?.....	☒	☐ Sand shrimp

Additional Notes: MS/MSD for PAHs only

✓ SLW

Surface Water Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18-36 Sample No.: NSWSO-7-2012 [0830]
NSWSO-17-2012(Dup)[0840]

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/12 0825

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53° F, light 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: Two lines run across Sweeper Cr. west ~ 100ft (upstream) see photo taken during shoreline inspection on 8/28/12 at 08:24 SD		
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 fast running water, no odors

7.	Is there vegetation growing nearby?	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? eagles, tracks, silver salmon Daily Warden	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

12 Ft wide, good flowing water, approx. 1.5 ft. 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

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18-36 Sample Location: NSWSD-7

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/12 / 0825

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, Light rain

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-7-2012 Dup: NSWSD-17-2012

Time Sample Collected: 0830 Dup: 0840

Sampling Method: Grab

Remarks (Color/Odor): No odors

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	0825	5.97	12.7	7	3.41	13.2	0.5	126

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

Surface Water Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18-36 Sample No.: ASWSD-8-2012 [1115]

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/12 1100

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58°F, 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 water, good flow, no odors

7.	Is there vegetation growing nearby? Vegetation along shoreline	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? teal, cono, eagle, small song birds	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

Collected at stream, 25 ft wide x 16 inches deep

8.	Is erosion occurring? If yes, describe conditions and severity	☒	☐

Erosion along retaining wall ~10ft upstream & upgradient from sample location not likely contributing to petroleum contamination. See photos 9/12/12 1053

9.	Is deposition occurring in the water body? If yes, describe conditions	☐	☒

Additional Notes: _____

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: South of Runway 18-36 Sample Location: NSWSD-8

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/12 1100

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 58° F, overcast

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-8-2012 (MS/MSD on BTEX)

Time Sample Collected: 1115

Sampling Method: Grab

Remarks (Color/Odor): NO odors

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	1110	7.04	4.24	8	8.44	13.4	0.2	121

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: MS/MSD on BTEX 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

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 14 Well No.: 01-153

Inspector(s): B Giles / D. Balmer Date/Time: 8/30/12 0815

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, drizzle ~50°F (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? lid off / cap on	☒	☐
4. Specify type of cap: 1½ in 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? collar 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards - 3	☒	☐

16. Previous well depth: 27.07'. Current well depth: 27.19'. soft

17. Depth to water: 18.46 ft tc.

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen - 14.0 - 24.0' gs
" 17.0 - 27.0' tc.
Sat screen - 18.46 - 27.0
Intake - 22.7'

v' slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 14 Sample Location: 01-153

Inspector(s): B Giles / D Balmer Date/Time: 8/30/12 0815

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, drizzle ~50°F SLW

Well Data

Diameter of Well Casing: 1½ in.

Depth to Water Below Top of Casing (feet): 18.46' TOC

Total Depth of Well Below Top of Casing (feet): 27.07 (2010) 27.19 (2012) SLW

Purge Method: Low flow peristaltic Intake set at 22.7'

Calculate if well parameters do not stabilize per the work plan: (using 2010 total depth)

Length of Water Column in Well (feet): 8.61'

Gallons per Foot: 0.10 g Gallons in Well: 0.86 g

Three Times Casing Volume: 2.58 g Gallons Purged from Well: 3.0 g

Water Sample Data

Sample Number: 01-153-2012

Time Sample Collected: 0910

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): Green biofouling in water

Stabilized? NO 3 Casing Volumes Removed? YES

Purge Vol. (gallons)	Time (mtn)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	0845	5.82	0.425	56.0	5.16	5.85	0.0	114
.5	0849	6.06	0.316	9.4	5.01	5.72	0.0	74
1.0	0853	6.13	0.264	1.5	4.28	5.70	0.0	65
1.5	0857	6.15	0.255	23.0	5.60	5.60	0.0	61
2.0	0901	6.18	0.252	405.0	5.50	5.07	0.0	57
2.5	0905	6.20	0.250	38.1	5.44	5.69	0.0	56
3.0	0909	6.22	0.253	47.1	4.16	5.70	0.0	53

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 14 Well No.: MW14-5

Inspector(s): BGiles / D Bridmen Date/Time: 8/30/12 0930

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, drizzle ~50°F (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-in PVC slip cap		
5. Specify size and number of bolts on flush-mount cap: 3 - 9/16-in 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards - 3	☒	☐

16. Previous well depth: 23.99'. Current well depth: 23.99'.

17. Depth to water: 15.87' tc. No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen - 14.0 - 24.0 gs

Sat Screen - 15.87 - 24.0

Intake at 19.94'

JSW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SUMU 14 Sample Location: MW14-5

Inspector(s): BGiles / D. Balmer Date/Time: 8/30/12 0930

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cool, drizzle ~50° F SW

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 15.87' TC

Total Depth of Well Below Top of Casing (feet): 23.99 (2011) (& 2012) SW

Purge Method: Low flow peristaltic Intake at 19.94'

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.12'

Gallons per Foot: 0.16 Gallons in Well: 1.30

Three Times Casing Volume: 3.90 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: MW14-5-2012 and MW24-5-2012 (dup)

Time Sample Collected: 1025 w/MS/MSD 1035

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	0957	6.85	0.193	0.0	0.43	6.12	0.0	35
1.5	1001	6.36	0.201	1.6	0.00	5.79	0.0	19
1.0	1005	6.23	0.212	0.5	0.00	5.77	0.0	15
1.5	1009	6.21	0.223	3.7	0.00	5.77	0.0	10
2.0	1013	6.19	0.230	0.2	0.00	5.75	0.0	9
2.5	1017	6.20	0.232	0.0	0.00	5.77	0.0	7
3.0	1021	6.21	0.234	0.0	0.00	5.77	0.0	5

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 15 Well No.: MW15-3

Inspector(s): BGiles / D Balmer Date/Time: 8/30/12 1135

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cold, breezy ~50°F (W)

	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 butterfly		
5. Specify size and number of bolts on flush-mount cap: No lid, no bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? Dirt filled	☐	☒
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: None	☐	☒

16. Previous well depth: 21.50. Current well depth: 21.57'.

17. Depth to water: 13.81' TOC. No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

√ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 15 Well No.: MW15-424

Inspector(s): B Giles / D. Balmer Date/Time: 8/30/12 1145

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, cold, breezy ~50° F 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-in 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 & corroded 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: Bollards - 3	☒	☐

16. Previous well depth: 26.39 (SWMU 5 11/12). Current well depth: 26.39'.

17. Depth to water: 18.40' TC No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

/ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 17 Well No.: 05-735

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/4/12 1400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°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? Rusty surface of outer casing	☒	☐
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.

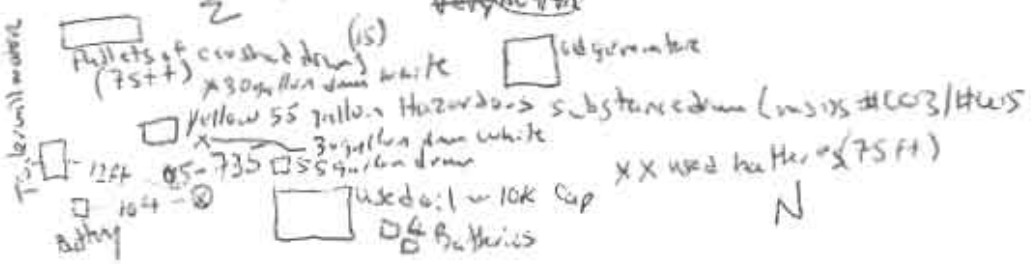
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards (3)	☒	☐

16. Previous well depth: 21.80 ft btoc Current well depth: 21.50 ft btoc hard bottom

17. Depth to water: 15.98 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Within 75' from well these items noted: 5 Heavy duty equipment batteries, 15 pallets of wash downs, three old (not usable) bentil generators, 2 unk 30 gallon drums, 1 yellow 55 gallon drum labeled Hazardous substance, 10K used oil tank, broke down suburban vehicle, Area around Power house isn't managed well. very M 9/4/12



WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 17 Sample Location: 05-735

Inspector(s): A Lewis, R Boyd Date/Time: 9/4/12 1400

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55° F, overcast, light wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 15.98

Total Depth of Well Below Top of Casing (feet): 21.80 (2011) 21.80 (2012)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.82 (2011 DTB used)

Gallons per Foot: 0.16 Gallons in Well: 0.93

Three Times Casing Volume: 2.79 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 05-735-2012 Dup: 05-745-2012

Time Sample Collected: 1440 Dup: 1445

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear, no foul odors

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	1415	6.59	0.570	34	1.22	7.31	0.0	-74
.5	1419	6.60	0.541	25	0.00	7.05	0.0	-81
1.0	1423	6.61	0.524	19	0.00	7.09	0.0	-82
1.5	1427	6.62	0.531	18	0.00	7.12	0.0	-78
2.0	1431	6.61	0.525	19	0.00	7.05	0.0	-76

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Dup for VOCs (PCE+ daughters)

*See monitoring well visual Inspection form for site conditions around 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

3 of 3

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 17 Well No.: 05-375

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/12 0900

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: 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? Surface Custom 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: 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: 3X Bollards	☒	☐

16. Previous well depth: 14.90 ft btoc (2010) Current well depth: 14.91 ft btoc

17. Depth to water: 4.33 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

*(7) cracked monument collar as noted during previous inspections

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 17 Sample Location: 05-375

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/12 0900

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 4.33

Total Depth of Well Below Top of Casing (feet): 14.90 (2010) 14.91 (2012) RD

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 10.57 (2010 DTB used)

Gallons per Foot: 0.16 Gallons in Well: 1.69

Three Times Casing Volume: 5.07 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 05-375-2012

Time Sample Collected: 0945

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear 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	0924	6.14	0.455	2	0.87	10.34	0.0	-28
.5	0930	6.16	0.445	3	0.00	10.38	0.0	-36
1.0	0934	6.18	0.443	4	0.00	10.38	0.0	-42
1.5	0938	6.19	6.444	4	0.00	10.37	0.0	-45

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 17 Well No.: PP-05

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/12 1025

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: 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? Surface rust, lid is hard to open	☒	☐
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 odor during purge, moderate petroleum odor on tubing	☒	☐
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: 16.39 ft btoc (2012) Current well depth: 16.39 ft btoc (Hard bottom)

17. Depth to water: 10.91 ft btoc

18. PID reading at wellhead: 1.1 ppm Breathing Zone: 0.0 ppm

Additional notes: _____

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 17 Sample Location: PP-05

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/5/12 1025

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 10.91

Total Depth of Well Below Top of Casing (feet): 16.39 (2010) 16.39 (Hard bottom) (2012) (SS)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.48 (2010 DTB used)

Gallons per Foot: 0.16 Gallons in Well: 0.88

Three Times Casing Volume: 2.63 Gallons Purged from Well: 1.50

Water Sample Data

Sample Number: PP-05-2012

Time Sample Collected: 1125

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): No odor during purge. Moderate petroleum odor on tubing. 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	1048	6.37	0.661	12	0.94	8.27	0.0	-52
.25	1053	6.38	0.662	17	0.89	8.32	0.0	-52
.50	1058	6.38	0.661	39	0.38	8.30	0.0	-52
.75	1103	6.39	0.660	41	0.31	8.29	0.0	-53
1.00	1108	6.40	0.660	40	0.00	8.31	0.0	-54
1.25	1113	6.41	0.661	40	0.00	8.33	0.0	-55
1.50	1118	6.41	0.666	43	0.00	8.35	0.0	-56

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Purged well similar to previous years notes due to heavy drawdown.

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: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 17 Well No.: R-1

Inspector(s): A. Lewis, RBaad Date/Time: 9/4/12 1530

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°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?	☒	☐
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 Small 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: 3x Bollards	☒	☐

16. Previous well depth: 17.03 ftbtoc Current well depth: 17.07 ftbtoc soft bottom

17. Depth to water: 2.24 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 17 Sample Location: R-1

Inspector(s): A. Lewis, R. Bagd Date/Time: 9/4/12 1530

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 55°F, overcast, light wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 2.24

Total Depth of Well Below Top of Casing (feet): 17.03 (2010) 17.07 (2012)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 14.79 (2010 DTB used)

Gallons per Foot: 0.16 Gallons in Well: 2.37

Three Times Casing Volume: 7.0 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: R-1-2012

Time Sample Collected: 1610

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): light sheen of petro / 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	1543	6.48	0.484	7	3.01	8.42	0.0	-16
.5	1547	6.47	0.485	8	2.20	7.97	0.0	-18
1.0	1551	6.47	0.485	4	1.84	7.68	0.0	-21
1.5	1555	6.46	0.484	7	1.59	7.62	0.0	-22
2.0	1559	6.46	0.483	8	1.51	7.64	0.0	-22
2.5	1603	6.47	0.482	3	1.48	7.62	0.0	-23

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Well No.: 12-105

Inspector(s): John Highstone/Sheri Wunderlich Date/Time: 8/29/12 14:30

Company: Sealaska Environmental Services, LLC

Weather/Temperature: partly sunny, 50° F, wind 25 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		
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: bollards - 3 (+ 2 nearby 12-104)	☒	☐

16. Previous well depth: 18.91' tc. Current well depth: 18.92' tc.

17. Depth to water: 10.78' tc

18. PID reading at wellhead: 0.8 ppm Breathing Zone: 0.0 ppm

Additional notes: soft bottom

1 picture facing south

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Sample Location: 12-105

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/12 1100

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, light wind, light fog

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 10.73

Total Depth of Well Below Top of Casing (feet): 18.92

Purge Method: low-flow peristaltic

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: 2.0

Water Sample Data

Sample Number: 12-105-2012

Time Sample Collected: 1140

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear water, faint smell of 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	1120	6.13	0.628	0.0	1.34	8.71	0.0	-40
1.5	1124	6.14	0.661	0.0	0.00	9.08	0.0	-47
1.0	1128	6.15	0.695	0.0	0.00	9.18	0.0	-56
1.5	1132	6.16	0.698	0.0	0.00	9.20	0.0	-59
2.0	1136	6.17	0.699	0.0	0.00	9.22	0.0	-61

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 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

✓slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Well No.: 12-106

Inspector(s): John Highstone, Sherri Wunderlich Date/Time: 8/29/12 14:25

Company: Sealaska Environmental Services, LLC

Weather/Temperature: partly sunny, 50° F, wind 25 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		
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 monument ring, concrete pad is partially broken	☒	☐
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: 2 bollards	☒	☐

16. Previous well depth: 20.67' tc Current well depth: 20.63' tc

17. Depth to water: 10.54' tc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Soft button
1 picture facing south w/ cracked monument ring
2nd picture facing south

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 59 Well No.: 12-114

Inspector(s): John Hightower/Sheri Wunderlich Date/Time: 8/29/12 14:40

Company: Sealaska Environmental Services, LLC

Weather/Temperature: partly sunny, 50°F, wind 25 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" 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? monument ring 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 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: 17.90' tc .

17. Depth to water: 10.01' tc

18. PID reading at wellhead: 0.1 ppm Breathing Zone: 0.0 ppm

Additional notes: hard bottom

1 picture facing south

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Sample Location: 12-114

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/12 0940

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 52°F, overcast, fog, windy

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 9.98

Total Depth of Well Below Top of Casing (feet): 17.90

Purge Method: low-flow peristaltic

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: 1.27

Three Times Casing Volume: 3.80 Gallons Purged from Well: 4.0

Water Sample Data

Sample Number: 12-114-2012

Time Sample Collected: 1035

Sampling Method: Low-flow peristaltic

Remarks (Color/Odor): clear water without 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	1000	5.56	0.390	5	1.34	7.12	0.0	131
.5	1004	5.53	0.388	4	0.21	7.28	0.0	142
1.0	1008	5.54	0.393	Ø	0.00	7.26	0.0	98
1.5	1012	5.57	0.391	Ø	0.00	7.21	0.0	76
2.0	1016	5.59	0.392	Ø	0.00	7.21	0.0	57
2.5	1020	5.62	0.389	0	0.00	7.17	0.0	39
3.0	1024	5.67	0.389	Ø	0.00	7.08	0.0	30
3.5	1028	5.70	0.352	Ø	0.00	6.97	0.0	21
4.0	1032	5.73	0.362	Ø	0.00	6.94	0.0	14

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 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

✓ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Well No.: 12-121

Inspector(s): JOHN HIGHSTONE Date/Time: 8.29.12/0840

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 25 MPH WIND, 45°

	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" DVC SLIP		
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 .01 .		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: 3 BOLLARDS	☒	☐

16. Previous well depth: 17.67' TC. Current well depth: 17.68' TC.

17. Depth to water: 13.85'

18. PID reading at wellhead: 0.6 Breathing Zone: 0.0

Additional notes: HARD BOTTOM
1 PICTURE FACING SOUTH
DTP - 13.84

Product thickness 0.03' on 8/31/12 at 14:05

✓ GW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Sample Location: 12-121

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/13/12 1405

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, rain, wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 13.86 DTP=13.83

Total Depth of Well Below Top of Casing (feet): 17.68

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: 0.16 Gallons in Well:

Three Times Casing Volume: Gallons Purged from Well:

Water Sample Data

Sample Number: 12-121-2012

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)**				
N/A		N/A		N/A				

Notes: Breathing zone PID:

DTP=13.83 DTW=13.86 PT=0.03

Did not sample, as per CMP due to PT ≥ 0.02' (x)

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Well No.: 12-124

Inspector(s): John Highstone / Stern Wunderlich Date/Time: 8/29/11 14:05

Company: Sealaska Environmental Services, LLC

Weather/Temperature: partly sunny, wind 25mph, 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" 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? cracked, needs to move west, crack on top	☒	☐
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: 21.26' tc Current well depth: 21.28' tc.

17. Depth to water: 13.13' tc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: soft bottom

1 picture facing south

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Well No.: 12-125

Inspector(s): John Highstone / Sheri Wardlaw Date/Time: 8/29/12 14:12

Company: Sealaska Environmental Services, LLC

Weather/Temperature: partly sunny, wind 25 mph, 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: 6" 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: 18.93' . Current well depth: 18.93' tc

17. Depth to water: 10.93' tc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: hard bottom

1 picture facing south

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Well No.: 12-203

Inspector(s): JOHN HIGHSTONE Date/Time: 8-29-12 / 0855

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 25 mph WIND, 45°

	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: 4 BALLARDS	☒	☐

16. Previous well depth: 19.91' TC. Current well depth: 19.89' TC.

17. Depth to water: 2.77'

18. PID reading at wellhead: 0.4 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM
1 PICTURE FACING WEST
REMOVED ABSORBENT SOCK

✓ slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Sample Location: 12-203

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/31/12 1200

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51° F, overcast, wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 12.70

Total Depth of Well Below Top of Casing (feet): 19.89

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.19

Gallons per Foot: 0.16 Gallons in Well: 1.15

Three Times Casing Volume: 3.45 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: 12-203-2012

Time Sample Collected: 1245

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): light smell of petroleum, clear w/ brk

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	1219	6.43	0.991	41	1.13	7.01	0.0	-112
.5	1223	6.45	0.981	21	0.00	7.08	0.0	-111
1.0	1227	6.47	0.978	11	0.00	7.05	0.0	-114
1.5	1231	6.49	0.973	8	0.00	7.03	0.0	-115
2.0	1235	6.49	0.975	5	0.00	7.00	0.0	-117
2.5	1239	6.50	0.971	5	0.00	6.98	0.0	-118

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 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

✓ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Well No.: 12-601

Inspector(s): John Highstone, Sherri Wunderlich Date/Time: 8/29/12 14 55

Company: Sealaska Environmental Services, LLC

Weather/Temperature: partly sunny, 50° F, wind 25 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		
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: 15.91. Current well depth: 16.09.

17. Depth to water: 4.40' btc

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: hard bottom

1 picture facing east

✓ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Well No.: 12-607

Inspector(s): John Highstone, Sherri Wunderlich Date/Time: 8/29/12 15:20

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly sunny, 50° F, wind 25 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		
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: 12.77. Current well depth: 12.78.

17. Depth to water: 10.90' tc

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: hard bottom

1 picture facing west

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Swan SE Well No.: 12-610

Inspector(s): John Highstone, Sherri Wunderlich Date/Time: 8/29/12 15:10

Company: Sealaska Environmental Services, LLC

Weather/Temperature: partly sunny, 50° F, wind 25 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		
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: 2 bollards	☒	☐

16. Previous well depth: 16.39. Current well depth: 16.61' tc.

17. Depth to water: 16.35' tc

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: hard bottom

1 picture facing southeast

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Well No.: 12-611 14:45

Inspector(s): John Highstone, Sherri Wunderlich Date/Time: 8/29/12 ✓

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly sunny, 50°, wind 25 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: 1"12" 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: 15.96'. Current well depth: 15.96' tc.

17. Depth to water: 4.08' tc

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: hard bottom

1 PICTURE FACING SOUTH

Seep and Shoreline
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 58 Well No.: 12-601

Inspector(s): A. Lewis, R. Bayd Date/Time: 8/31/12 1445

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 53°F, heavy rain, overcast, wind

		Yes	No
1.	Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate.	☐	☒

N/A

2.	Is the seep flowing directly into a surface water body? N/A	☐	☐
3.	Is this a new seep or a seep that has been previously documented? N/A		
4.	Are there any odors? If yes, describe odor and intensity N/A	☐	☐
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 N/A	☐	☒
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!	☐	☒

N/A

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.	☒	☐

2 fallen 15 ft wooden powerline poles to the south, poles appear to be covered with creosote but since this is a DRO site, the poles are not a potential source of petroleum contamination

Additional Notes: (pipeline appears to be abandoned) ← Pipeline with wooden supports

Additional Notes: Naturally occurring water in drainage ~ 1 inch deep.

VSW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 60 Tank Farm A Well No.: LC5A

Inspector(s): B Giles / D Brilmer Date/Time: 9/5/12 1100

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly cloudy, breezy, cold ~50° F (slw)

	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 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? No i.d on 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?	☐	☒
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 (slw)	☐	☒

16. Previous well depth: 12.55'. Current well depth: 12.57'.

17. Depth to water: 6.23' tc. No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen - ~~14.5~~ 4.5 - 9.5 gs

Screen - 7.0 - 12.0 tc.

Intake - 9.5' tc

slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 60 Tank Farm A Sample Location: LC5A

Inspector(s): B Giles / D Brahmer Date/Time: 9/5/12 1100

Company: Sealaska

Weather/Temperature: Partly cloudy, breezy, cold ~50°F (SW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 6.23'

Total Depth of Well Below Top of Casing (feet): 12.55 (2011) 12.57 (2012) (SW)

Purge Method: Low flow peristaltic Intake @ 9.5' bc.

Calculate if well parameters do not stabilize per the work plan: (using 2011 DTB)

Length of Water Column in Well (feet): 6.32'

Gallons per Foot: 0.16 g Gallons in Well: 1.01 g

Three Times Casing Volume: 3.03 g Gallons Purged from Well: 2.0 g

Water Sample Data

Sample Number: LC5A-2012

Time Sample Collected: 1140

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	1120	6.10	0.249	0.0	3.56	10.46	0.0	-39
.5	1124	6.72	0.254	0.0	0.00	10.42	0.0	-72
1.0	1128	6.51	0.259	0.0	0.00	10.42	0.0	-78
1.5	1132	6.56	0.257	0.0	0.00	10.39	0.0	-82
2.0	1136	6.60	0.257	0.0	0.00	10.42	0.0	-83

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 60 Tank Farm A Well No.: MW-E006

Inspector(s): B Giles / D Balmer Date/Time: 9/5/12 0810

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast, breezy, cold 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: 2-in 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: Ice + fowling on probe	☐	☒
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: 18.40'. Current well depth: 18.42'.

17. Depth to water: 6.07' tc. No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes: _____

Screen - 5' - 15' bgs

Screen - ~~7.0 - 17.0' bgs~~ 8.0 - 18.0' bgs

Intake - 13.0' bgs.

√ SHJ

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 60 Tank Farm A Sample Location: MW-E006

Inspector(s): B Giles / D Balmer Date/Time: 9/5/12 0810

Company: Sentaska

Weather/Temperature: Overcast, breezy, cold 45°F

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 6.07' tc

Total Depth of Well Below Top of Casing (feet): 18.40' (in 2011) 18.42 (in 2012)

Purge Method: Low flow - peristaltic Intake at 13.0' tc

Calculate if well parameters do not stabilize per the work plan: (using 2011 data)

Length of Water Column in Well (feet): 12.33

Gallons per Foot: 0.16 g Gallons in Well: 1.97 g

Three Times Casing Volume: 5.92 g Gallons Purged from Well: 4.5

Water Sample Data

Sample Number: MW-E006-2012

Time Sample Collected: 0920

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	0832	6.13	0.498	0.0	0.00	6.72	0.0	-18
.5	0837	6.40	0.467	0.0	0.00	6.59	0.0	-51
1.0	0842	6.46	0.444	0.0	0.00	6.98	0.0	-64
1.5	0847	6.53	0.424	0.0	0.04	7.48	0.0	-69
2.0	0852	6.53	0.434	0.0	0.14	7.40	0.0	-73
2.5	0857	6.55	0.457	31.2	0.00	7.27	0.0	-78
3.0	0902	6.58	0.472	43.3	0.00	7.02	0.0	-79
3.5	0907	6.64	0.469	55.5	0.00	6.95	0.0	-79
4.0	0912	6.62	0.467	52.3	0.00	6.62	0.0	-80
4.5	0917	6.61	0.465	55.5	0.00	6.92	0.0	-81

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 60 Tank Farm A Well No.: 650

Inspector(s): B. Giles / D Balmer Date/Time: 9/5/12 1620

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly cloudy, calm, cold ~50°F (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-in butterfly		
5. Specify size and number of bolts on flush-mount cap: 2 - 9/16 in bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☑
7. Is the monument in good condition? Concrete pad pushed above ground	☐	☒
8. Is the casing in good condition? bentonite pushed up around cap	☑	☐
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 (SW)	☐	☒

16. Previous well depth: 16.31' . Current well depth: 16.32' tc .

17. Depth to water: 10.09' tc No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen 7.0 - 17.0 gs

Sat. Screen - 10.1 - 16.3 gs

Intake - 13.2' gs

✓SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 60 Tank Farm A Sample Location: 650

Inspector(s): B Giles / D Balmer Date/Time: 9/5/12 1620

Company: Seelaska

Weather/Temperature: Partly cloudy, calm, cold ~50° F (SLW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 10.09' tc

Total Depth of Well Below Top of Casing (feet): 16.31' (2011 survey) 16.31' (2012)

Purge Method: Low flow peristaltic Intake at 13.2' tc

Calculate if well parameters do not stabilize per the work plan: (using previous DTB)

Length of Water Column in Well (feet): 6.22'

Gallons per Foot: 0.16 Gallons in Well: 0.99

Three Times Casing Volume: 2.99 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: 650-2012

Time Sample Collected: 1715

Sampling Method: Low flow peristaltic

Remarks (Color/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	1640	6.46	0.276	114	0.68	7.91	0.0	-12
.5	1645	6.31	0.327	99.7	0.00	7.82	0.0	-21
1.0	1650	6.30	0.335	81.8	0.00	7.81	0.0	-25
1.5	1655	6.29	0.350	64.7	0.00	7.83	0.0	-29
2.0	1700	6.31	0.337	85.7	0.00	7.81	0.0	-31
2.5	1705	6.31	0.336	84.2	0.00	7.78	0.0	-33
3.0	1710	6.34	0.333	97.4	0.00	7.75	0.0	-35

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 60 Tank Farm A Well No.: 651

Inspector(s): B Giles / D Balmer Date/Time: 9/5/12 1455

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly cloudy, breezy, cold ~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-in butterfly		
5. Specify size and number of bolts on flush-mount cap: 3 - 9/16 in bolts		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? Monument Pad pushed up from ice.	☐	☒
8. Is the casing in good condition? Bentonite pushing up around cap - pushed cap off.	☒	☐
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: 15.30. Current well depth: 15.29'.

17. Depth to water: 9.11 'tc No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen - 5.0' - 15.0' gs
Sch. screen - 9.11 - 15.0'
Intake - 12.0'

√ slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 60 Tank Farm A Sample Location: 651

Inspector(s): B Giles / D Balmer Date/Time: 9/5/12 1455

Company: Seralaska

Weather/Temperature: Partly cloudy, breezy, cold ~50° F

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 9.11' te

Total Depth of Well Below Top of Casing (feet): 15.30 (2011) 15.29 (2012)

Purge Method: Low flow peristaltic Intake at 12.0' te

Calculate if well parameters do not stabilize per the work plan: (using 2011 DTB)

Length of Water Column in Well (feet): 6.19'

Gallons per Foot: 0.16 g Gallons in Well: 0.99 g

Three Times Casing Volume: 2.97 g Gallons Purged from Well: 3.0 g

Water Sample Data

Sample Number: 651-2012

Time Sample Collected: 1550

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): Some brown bio fouling on tubing.

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	1516	6.43	0.294	125.0	0.46	6.76	0.0	2
.5	1521	6.25	0.293	27.5	0.00	6.61	0.0	-22
1.0	1526	6.24	0.294	29.2	0.05	6.61	0.0	-28
1.5	1531	6.25	0.294	30.6	0.00	6.62	0.0	-32
2.0	1536	6.27	0.298	55.8	0.00	6.64	0.0	-35
2.5	1541	6.26	0.299	66.4	0.00	6.67	0.0	-38
3.0	1546	6.27	0.300	69.0	0.00	6.66	0.0	-39

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Some bio fouling on tubing.

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

1 of 1

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 60 Tank Farm A Well No.: 652

Inspector(s): Berles / D Balmer Date/Time: 9/5/12 1330

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly cloudy, breezy, cold ~50°F (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-in butterfly		
5. Specify size and number of bolts on flush-mount cap: 2 - 9/16 in 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: NM (SW)	☐	☒

16. Previous well depth: 15.30'. Current well depth: 15.29'.

17. Depth to water: 9.40' tc No product

18. PID reading at wellhead: 0.3 ppm Breathing Zone: 0.0

Additional notes:

Screen - 5.0 - 15.0' gs

Sct. Screen 9.4 - 15.0' gs

Intake - 12.2' gs

√ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 60 Tank Farm A Sample Location: 652

Inspector(s): BGiles / D Bodmer Date/Time: 9/5/12 1330

Company: Seralaska

Weather/Temperature: Partly cloudy, breezy, cold ~50°F (BW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 9.40'

Total Depth of Well Below Top of Casing (feet): 15.30' (2011) 15.29' (2012) (BW)

Purge Method: Low flow peristaltic Intake to 12.2' tc

Calculate if well parameters do not stabilize per the work plan: (using 2011 data) (BW)

Length of Water Column in Well (feet): 5.90'

Gallons per Foot: 0.16 Gallons in Well: 0.94 g

Three Times Casing Volume: 2.83 g Gallons Purged from Well: 3.0 g

Water Sample Data

Sample Number: 652-2012

Time Sample Collected: 1423

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): None - occasional odor

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	1351	6.07	0.753	61.7	0.91	7.82	0.0	-52
.5	1356	6.25	0.725	90.3	0.00	7.62	0.0	-87
1.0	1401	6.31	0.692	74.5	0.00	7.56	0.0	-92
1.5	1406	6.35	0.651	63.5	0.00	7.47	0.0	-95
2.0	1411	6.35	0.641	63.0	0.00	7.50	0.0	-97
2.5	1416	6.36	0.630	63.1	0.00	7.49	0.0	-98
3.0	1421	6.42	0.609	60.0	0.00	7.47	0.0	-100

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

√ BW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 60 Tank Farm A Well No.: 653

Inspector(s): B Giles / D Balmer Date/Time: 9/5/12 0940

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly cloudy, breezy, cold ~50° F (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 in 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: Petroleum odor - slight	☑	☐
10. Is there an oily sheen on the water? brown floc in purge 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: Bollards - 3	☑	☐

16. Previous well depth: 17.44'. Current well depth: 17.45'.

17. Depth to water: 10.16' tc. DTP - 10.15' tc.

18. PID reading at wellhead: 1.1 ppm Breathing Zone: 0.0

Additional notes:

Screen - 5.0 - 15.0' gs
" 8.0 18.0 tc.
Sch screen 10.15 - 17.44

Intake - 13.8' tc

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 60 Tank Farm A Sample Location: 653

Inspector(s): B Giles / D Balmer Date/Time: 9/5/12 0940

Company: Sealaska

Weather/Temperature: partly cloudy, breezy, cold, ~ 50°F (-SLW)

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 10.15'

Total Depth of Well Below Top of Casing (feet): 17.44' (2011) 17.45 (2012) (SW)

Purge Method: Low flow peristaltic Intake at 13.5' +/-

Calculate if well parameters do not stabilize per the work plan: (using 2011 DTB)

Length of Water Column in Well (feet): 7.29'

Gallons per Foot: 0.16 g Gallons in Well: 1.17 g

Three Times Casing Volume: 3.50 g Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: 653-2012

Time Sample Collected: 1025

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): Petroleum 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	0958	6.09	0.165	33.4	0.24	9.08	0.0	73
.5	1003	5.91	0.151	37.0	0.00	9.12	0.0	84
1.0	1008	5.87	0.150	29.8	0.00	9.13	0.0	93
1.5	1013	5.85	0.150	35.1	0.00	9.13	0.0	99
2.0	1018	5.80	0.150	32.6	0.00	9.11	0.0	105
2.5	1023	5.80	0.149	32.9	0.00	9.15	0.0	108

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Sheen on purge water - containerized.

Well Casing Volumes

GAL/FOOT ¼" = 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

Seep and Shoreline
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 60 Tank Farm A Well No.: NA

Inspector(s): B. Giles / D Belmer Date/Time: 8/28/12 0854

Company: Sealaska Environmental Services, LLC

Weather/Temperature: cloudy, mild, light drizzle ~50°F (10)

		Yes	No
1.	Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate.	☒	☐

Very small seep w/ petroleum sheen discharging to culvert stream above Boom 10.

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? known seep area.		
4.	Are there any odors? If yes, describe odor and intensity	☐	☒
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	☒	☐

Shoreline mudflats near Boom 10 have light iron stain covering sediment.

7.	Is there vegetation growing on the shoreline? some beach grass.	☒	☐
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	☒	☐

Numerous metal debris, cables, rebar, and concrete pieces near

Additional Notes: downstream bridge. Not a source of petroleum contamination.

/SIW

Sediment Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 60 Sample No.: 852S-2012 [1215]

Inspector(s): A Lewis, R. Boyd Date/Time: 8/28/12 1145

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 60°, light wind, overcast

	Yes	No
1. Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☒	☐

light organic matter in sediment, small grain sand, light brown at surface 1/8" deep black.

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination	☒	☐

Heavy smell of petroleum

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 & color change 1/8" deep from light brown to black

5. Is there vegetation growing in the sediment or nearby? ..... along shoreline/bank	☒	☐
6. Are there any insects, invertebrates, or fish in or on the sediment or evidence of wildlife nearby?.....	☒	☐

Eagles, teal, coho seen down gradient 75'

Additional Notes:

√slw

Surface Water Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 60 Sample No.: 852-2012 [240]

Inspector(s): A. Lewis, R. Boyd Date/Time: 8/28/12 / 1300

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 60°, light wind, 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	☒	☐

8/25/12 RB Moderate ~~front~~ smell of petroleum

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.	☒	☐

From culvert; beam locations to sweeper creek, orange discolored sand/sediment ½" below top layer of sediment black disturbed sand; moderate smell of petroleum

6. Describe the sample (clear, colored, muddy, odors, etc.):

water was clear below surface, orange floating particulate seen, light white foam along surface.

7.	Is there vegetation growing nearby? along banks, not below shoreline	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? teal, eagle, coho seen nearby	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

8ft across, 10" 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: previously sampled location was dry, moved down gradient along stream body approx. 75', as per Annette Franzen from corresponding sediment location

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 60 Sample Location: 852

Inspector(s): A. Lewis, R. Bayci Date/Time: 8/28/12 1230

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 60°, light wind, overcast

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: 852-2012

Time Sample Collected: 1240

Sampling Method: Grab

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)
initial	1237	6.21	14.4	20	8.33	14.4	0.3	-51

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SUMU 61 Tank Farm B Well No.: 14-113

Inspector(s): B Giles / D Balmer Date/Time: 9/6/12 0950

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly cloudy, breezy, 45°

	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 in 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? Movement & casing leaning ≥ 20°	☐	☒
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 (SW)	☐	☒

16. Previous well depth: 6.29. Current well depth: 6.31' tc.

17. Depth to water: 3.07' tc No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen 1.5-4.0 gs
" 4.0-6.5' tc
" 4.0-6.3' tc
Intake 5.2' tc.

√ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Sample Location: 14-113

Inspector(s): B Giles / D Bakner Date/Time: 9/6/12 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly cloudy, breezy, 45°F

Well Data

Diameter of Well Casing: 1.5"

Depth to Water Below Top of Casing (feet): 3.07' tc

Total Depth of Well Below Top of Casing (feet): 6.29' tc (2011) 6.3' (2012)

Purge Method: Low flow peristaltic Intake at 5.2' tc

Calculate if well parameters do not stabilize per the work plan: (using 2011 DTB) 6.29 - 3.07

Length of Water Column in Well (feet): 3.22'

Gallons per Foot: 0.10 g Gallons in Well: 0.32 g

Three Times Casing Volume: 0.97 g Gallons Purged from Well: 1.0

Water Sample Data

Sample Number: 14-113-2012

Time Sample Collected: 0925

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): Initially very turbid - gray - cleared up w/ purging

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	0907	6.40	0.491	>5.0	2.03	8.95	0.0	-48
.33	0912	6.49	0.543	>5.0	8.20	8.56	0.0	-76
.66	0917	6.55	0.521	44.6	12.07	8.47	0.0	-75
.99	0922	6.55	0.533	121.0	5.23	8.47	0.0	-77

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Well No.: 14-210

Inspector(s): B Giles / D Balmer Date/Time: 9/1/12 0920

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain, wind, cold ~50° F (GW)

	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: 1¼ in stainless thread 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 (GW)		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA (GW)	☐	☒

16. Previous well depth: 7.49' Current well depth: 7.49'

17. Depth to water: 2.34' tc. No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

Screen 3.5-5.5 gs
" 5.5-7.5' tc
Intake- 6.5' tc

√ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Sample Location: 14-210

Inspector(s): B Gates / D Balmer Date/Time: 9/1/12 0920

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain, wind, cold ~50° F (SLW)

Well Data

Diameter of Well Casing: 1¼ in

Depth to Water Below Top of Casing (feet): 2.34'

Total Depth of Well Below Top of Casing (feet): 7.49' ft (2011) (1 2012) GW

Purge Method: Low flow peristaltic Intake at 6.5'

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 5.15'

Gallons per Foot: 0.077 Gallons in Well: 0.40

Three Times Casing Volume: 1.19 g Gallons Purged from Well: 1.25 g

Water Sample Data

Sample Number: 14-210-2012

Time Sample Collected: 1100

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): None

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	0941	6.14	0.437	18.6	0.52	9.29	0.0	-49
.25	0946	6.31	0.355	42.8	0.72	9.15	0.0	-69
.50	0954	BUBBLES, ALLOW TO RECHARGE				B. G. PURGE 0957		
.50	1002	6.59	0.378	30.5	3.25	9.03	0.0	-54
.75	1007	6.44	0.359	14.7	3.17	9.18	0.0	-41
		ALLOW TO RECHARGE, BEGIN PURGING @ 5						
1.0	1030	6.44	0.370	25.9	1.89	8.94	0.0	-47
		ALLOW TO RECHARGE BEGIN PURGE AT 1042						
1.25	1047	6.40	0.362	2.6	5.29	9.15	0.0	-46

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Limited recharge to well caused drawdown to mid-screen.

Well allowed to recharge to obtain sample volume.

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Well No.: TFB-MW-4B

Inspector(s): B Giles / D. Belmer Date/Time: 9/1/12 1110

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain, wind, cold ~50°F (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-in 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	☐	☒
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 (SW)	☐	☒

16. Previous well depth: 29.65'. Current well depth: 29.75'.

17. Depth to water: 4.62' to no product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes: _____

/SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Sample Location: TFB-MW4B

Inspector(s): BGiles / D. Balmer Date/Time: 9/1/12 1110

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain, wind, cold ~50° F (SW)

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 4.62' TOC

Total Depth of Well Below Top of Casing (feet): 29.65' (2011)

Purge Method: Low flow peristaltic Insert tubing to 23.0' TOC

Calculate if well parameters do not stabilize per the work plan: (using 2011 DTB) (SW)

Length of Water Column in Well (feet): 25.03

Gallons per Foot: 0.16 g Gallons in Well: 4.00

Three Times Casing Volume: 12.0 Gallons Purged from Well: 0.75

Water Sample Data

Sample Number: TFB-MW4B-2012

Time Sample Collected: 1142

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)
1V: TIA	1126	6.36	0.397	0.0	0.02	7.64	0.0	-25
.25	1131	6.37	0.393	0.0	0.00	7.61	0.0	-28
.50	1136	6.39	0.393	2.0	0.00	7.51	0.0	-29
.75	1141	6.39	0.392	0.0	0.00	7.63	0.0	-30

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

Seep and Shoreline
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Well No.: (nearby locations) NL-04, NL-D-04, 14-113, 14-213 SLW 9/6/12

Inspector(s): ~~A. Lewis, R. Boyd~~ B. Giles/D Balmer Date/Time: 9/6/12 9/6/12 1010

A/6/12 DKB

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly cloudy, breezy, cold ~50° F SLW

		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 due to previous high water level.

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? horsetails, grasses, rushes	☒	☐
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.

✓ SLW

Surface Water Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Sample No.: NL-04-2012 (100C)

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/6/12 0945

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50 °F, moderate wind, partial 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: 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.)? Raven, pink salmon, Dolly Varden	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

30ft wide, 4ft 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

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Sample Location: NL-04

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/6/12 0945

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, moderate wind, partial overcast

Well Data

Diameter of Well Casing: Surface water location

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-04-2012

Time Sample Collected: 1000

Sampling Method: Grab

Remarks (Color/Odor): No odors, clear

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	0950	6.24	0.166	5	9.41	5.96	0.0	51

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

Sediment Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Sample No.: NL-045-2012 [1015] Dup: NL-145-2012 [1070]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/6/12 0945

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°, light wind, partial sun

		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	☐	☒
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:

*6. No insects or invertebrates in sediment, ~~along~~ at 9/6/12 site within stream

Dolly Varden & Pink Salmon seen swimming by

V SLW

Surface Water Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU '01 Sample No.: NL-D-04-2012

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/6/12 0840

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, moderate wind, partial 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, bottom of stream visible

7.	Is there vegetation growing nearby?	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? Raven, pink salmon	☒	☐

9. Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:

30 ft wide, 4 ft 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

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Sample Location: NL-D-04

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/6/12 / 0940

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°, moderate wind, partial sun

Well Data

Diameter of Well Casing: Surface water location

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-D-04-2012

Time Sample Collected: 0850

Sampling Method: Grab

Remarks (Color/Odor): No odors

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	0845	5.98	0.159	4	9.02	9.27	0.0	123
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

1 SW

Sediment Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 61 Sample No.: NL-D-045-2012 [0910]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/6/12 ~~0850~~ 0840

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, moderate wind, partial sun

		Yes	No
1.	Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☐	☒

Dark brown, ~~fine~~ (or plastic) silty clay with plant roots

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: MS/MSD on BTEX

*6. no insects/invertebrates in sediment, pink salmon/Dolly Varden in waterbody, Ravens seen flying around waterbody

v' SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: 03-101

Inspector(s): B Kercher J Highstone Date/Time: 9/10/12 1342

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain, Wind 45°

	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: Locking 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: Mild 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? soft bottom (per 2011 Tech)	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 27.03'. Current well depth: 26.88'.

17. Depth to water: 22.58

18. PID reading at wellhead: 0.8 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = 43

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 12 Eagle Bay Well No.: 03-102

Inspector(s): B Kercher, J Highstone Date/Time: 9/10/12 1058

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Light Rain Wind 45

	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: Ziu 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 Mild 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 21.26' Current well depth: 21.26' Hard Bottom

17. Depth to water: 14.22'

18. PID reading at wellhead: 0.1 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = 5

./SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: 03-103

Inspector(s): J Hightower B Kirchner Date/Time: 9/10/12 1102

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Light Rain Wind 45°

	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 PVC Slip		
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: 22.35'. Current well depth: 22.35' Hard Bottom

17. Depth to water: 16.05'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo #5

✓ slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Eagle Bay Sample Location: 03-103

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/11/12 0900

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 48° F, Moderate wind

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): 22.35

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.33

Gallons per Foot: 0.16 Gallons in Well: 1.01

Three Times Casing Volume: 3.04 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: 03-163-2012

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	0920	5.72	0.24	1	6.16	5.72	0.0	206
.5	0924	5.85	0.177	4	5.18	5.82	0.0	208
1.0	0928	5.86	0.174	5	5.07	5.79	0.0	209
1.5	0932	5.87	0.177	5	5.02	5.78	0.0	209

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 0.0 ppm, wellhead 0.3 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

√ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: 03-107

Inspector(s): B Kitchen J Hightstone Date/Time: 9/10/12 1351

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain, Wind 45°

	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: Two PVC Slip		
5. Specify size and number of bolts on flush-mount cap:		
6. Is there any evidence of tampering with the cap or well casing? NA	☐	☒
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: NA		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 32.97' Current well depth: 32.95' Soft Bottom

17. Depth to water: 27.26' ← 27.46' (per logbook) SW

18. PID reading at wellhead: 180 ppm Breathing Zone: 0.9 ppm

Additional notes: Photo - WP4

✓ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: D3-109

Inspector(s): B Kercher, J Hightower Date/Time: 9/10/12 0935

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Raining 45°

	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: Ziv 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: NA	☐	☒

16. Previous well depth: 36.79'. Current well depth: 36.74'. Hard Bottom

17. Depth to water: 30.07'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = 2
Grooved Pin

✓ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: T055

Site Name: SWMU 62 Eagle Bay Sample Location: 03-109

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/11/12 0955

Company: Seaflaska Environmental Services, LLC

Weather/Temperature: 48°F, moderate wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 30.04

Total Depth of Well Below Top of Casing (feet): 36.74

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.7

Gallons per Foot: 0.16 Gallons in Well: 1.07

Three Times Casing Volume: 3.22 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 03-109-2012

Time Sample Collected: 1050

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	1024	6.07	0.298	8	9.31	5.75	0.0	200
.5	1029	6.12	0.283	7	9.51	5.74	0.0	199
1.0	1034	6.13	0.279	7	9.40	5.71	0.0	199
1.5	1039	6.14	0.275	7	9.35	5.74	0.0	199
2.0	1044	6.15	0.277	7	9.30	5.74	0.0	199

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: MS/MSD on DRO

Breathing zone PID: 0.0 ppm

* large air bubbles seen throughout purge in sample bag

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 EAGLE BAY Well No.: 03-502

Inspector(s): JOHN HIGHSTONE, BETH KORCHIER Date/Time: 9-10-12 / 1404

Company: Sealaska Environmental Services, LLC

Weather/Temperature: RAIN, WIND, 45°

	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: NO CAP - MISSING 1/2" PVC SLIP		
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? LIGHT SHEEN < .01	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well? LIGHT SHEEN < .01	☐	☒
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: 26.32'. Current well depth: 26.30'.

17. Depth to water: 24.00'

18. PID reading at wellhead: 0.2 ppm Breathing Zone: 0.0

Additional notes: PHOTO = N

√ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Eagle Bay Sample Location: 03-502

Inspector(s): B Giles / D Balmer Date/Time: 9/11/12 0830

Company: Seralaska

Weather/Temperature: Cloudy, windy, cold 45°F

Well Data

Diameter of Well Casing: 0.5 in

Depth to Water Below Top of Casing (feet): 24.48' TC

Total Depth of Well Below Top of Casing (feet): 26.30' TC (20.3)

Purge Method: Low flow peristaltic Intake at 25.4' TC

Calculate if well parameters do not stabilize per the work plan:

Screen - 17.35' - 26.35' BS
Sat Scr. 24.48 - 26.3' TC
Intake - 25.4' TC

Length of Water Column in Well (feet): 1.82'

Gallons per Foot: 0.02 g (0.163 gal/ft) Gallons in Well: 0.03 g

Three Times Casing Volume: 0.10 g Gallons Purged from Well: 0.125 g

Water Sample Data

Sample Number: 03-502-2012

Time Sample Collected: 0910

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): None

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	0906	5.86	0.293	0.0	0.40	6.28	0.0	87
.125	0905	6.04	0.281	0.0	0.00	6.19	0.0	51

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

✓ DLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: 03-518

Inspector(s): B. Kercher J. Hightower Date/Time: 9/10/12 1321/1432

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain, wind 45°

	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 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 Strong 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: NA	☐	☒
16. Previous well depth: 33.95' Current well depth: 33.95' Hard Bottom		
17. Depth to water: 27.18'		
18. PID reading at wellhead: 28.0 ppm Breathing Zone: 0.4 ppm		

Additional notes: Photo = SW

✓ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: 03-898

Inspector(s): B Kercher J Hylstone Date/Time: 9/10/12 1142

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain Wind 45°

	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 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: 21.53. Current well depth: 21.37. Hard Bottom

17. Depth to water: 13.02

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = NW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Eagle Bay Sample Location: 03-898

Inspector(s): B Giles / D Balmer Date/Time: 9/11/12 1355

Company: Sealeska

Weather/Temperature: Cloudy, breezy, cold ~45°F (3W)

Well Data

Diameter of Well Casing: 2 in.

Depth to Water Below Top of Casing (feet): 12.99' tc

Total Depth of Well Below Top of Casing (feet): 21.37' tc (2012)

Purge Method: Low flow peristaltic Intake at 17.0' tc

Calculate if well parameters do not stabilize per the work plan:

Screen 7.75 - ~~21~~ 17.75 gs
" 10.75 - ~~20~~ 20.75 tc
Sat Scr. 12.99 - 21.0
Intake 17.0'

Length of Water Column in Well (feet): 8.38'

Gallons per Foot: 0.16 g Gallons in Well: 1.34

Three Times Casing Volume: 4.02 Gallons Purged from Well: 3.5 g

Water Sample Data

Sample Number: 03-898-2012

Time Sample Collected: 1450

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	1413	5.88	0.249	0.0	4.90	7.07	0.0	182
.5	1418	5.98	0.175	0.0	2.99	6.84	0.0	184
1.0	1423	5.97	0.173	0.0	2.90	6.79	0.0	183
1.5	1428	5.96	0.177	0.0	2.68	6.96	0.0	182
2.0	1433	5.95	0.179	0.0	2.50	6.92	0.0	180
2.5	1438	5.93	0.186	0.0	2.03	6.92	0.0	178
3.0	1443	5.97	0.185	0.0	2.09	6.86	0.0	175
3.5	1448	5.97	0.187	0.0	2.07	6.90	0.0	172

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: AMW-704

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/12 1250

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, rain, moderate 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 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? 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: _____	☐	☒

16. Previous well depth: 16.59 ft btoc (2011) Current well depth: 16.59 ft btoc (Hard bottom)

17. Depth to water: 7.09 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: _____

✓ SHJ

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Eagle Bay Sample Location: AMW-704

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/12 1250

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51° F, rain, moderate wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 7.09

Total Depth of Well Below Top of Casing (feet): 16.59 (2011) (2012)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 9.50

Gallons per Foot: 0.16 Gallons in Well: 1.52

Three Times Casing Volume: 4.56 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: AMW-704-2012

Time Sample Collected: 1335

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): Clear water with some orange flakes, 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	1312	5.98	0.219	16	1.70	8.47	0.0	103
1.5	1316	5.92	0.214	16	1.27	8.22	0.0	100
2.0	1320	5.91	0.212	15	1.34	8.16	0.0	98
2.5	1324	5.91	0.213	16	1.37	8.14	0.0	97
3.0	1328	5.90	0.213	15	1.40	8.15	0.0	96

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 0.0

Orange particulate seen at initial, allowed to purge one gallon prior to connecting to flow cell.

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SW MW 62 Eagle Bay Well No.: CTO-124-MW14

Inspector(s): B Kercher J Hofstra Date/Time: 9/18/12 - 1134

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Wind, Rain 45°

	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: Slip		
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: 16.73' Current well depth: 16.73' Head Bolt
17. Depth to water: 11.05'
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = 2

√ SIW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Eleven 62 Eagle Bay Well No.: TO-124-MW15

Inspector(s): B Kercher J Hofstetter Date/Time: 9/10/12 ~~1055~~ 1105

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Wind 215°

	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 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. 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 NA		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 20.09' Current well depth: 20.15' Hard Bottom

17. Depth to water: 17.82'

18. PID reading at wellhead: 4.8 ppm Breathing Zone: 0.0 ppm Let Air for 5 mins

Additional notes: Photo = NW
filter Sock Removed

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: HMW303-1

Inspector(s): B Kircher, S Hightstone Date/Time: 9/10/12 1022

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 45°

	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: Lin Slip		
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: 34.26' Current well depth: 34.25' Hard Bottom

17. Depth to water: 27.11'

18. PID reading at wellhead: 0.1ppm Breathing Zone: 0.0ppm

Additional notes: Photo = 5

√ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: HMW503-2

Inspector(s): B Kercher J Hightower Date/Time: 9/10/12 - 1028

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast Windy 45°

	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: Zinc 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: NA	☐	☒

16. Previous well depth: 32.14' Current well depth: 32.13' Soft Bottom

17. Depth to water: 26.93' BK 9/10/12

18. PID reading at wellhead: ~~32.12~~ 1.5 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = W

√ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Swan Lk East Bay Well No.: HMW-303-3

Inspector(s): B Kreklow J Highstone Date/Time: 9/10/12 0943

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Raining 45°

	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: Jim Butler		
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: 33.22' Current well depth: 33.22'. Hard Bottom

17. Depth to water: 27.85'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = N
Filter Sock Removed.

J.SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Sig Mill & Eagle Bay Well No.: HMW-303-4

Inspector(s): B Kershner & H Gibbons Date/Time: 9/6/12 0952

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Raining 45°

	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: Lin 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: NA	☐	☒

16. Previous well depth: 25.25'. Current well depth: 25.11'. Hard Bottom

17. Depth to water: 20.12'

18. PID reading at wellhead: 0.8 ppm Breathing Zone: 2.0 ppm

Additional notes: Water = 5'

√ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Shumlez Eagle Bay Well No.: HMW303-9

Inspector(s): B Kerchee J Hightstone Date/Time: 9/18/12 1040

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Wind 45°

	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 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: NA	☐	☒

16. Previous well depth: 34.28' Current well depth: 34.29' Hard Bottom

17. Depth to water: 26.35'

18. PID reading at wellhead: 0.2ppm Breathing Zone: 0.0 ppm

Additional notes: Photo-N20

VSW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU62 Eagle Bay Well No.: HMW303-10

Inspector(s): J Highstone B Kercher Date/Time: 9/10/12 1123

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain Wind 45°

	Yes	No
1. Was the monitoring well located?	X	
2. Is the well clearly labeled? If not, please re-label.	X	
3. Is there a cap on the monitoring well?	X	
4. Specify type of cap: 2in PVC Slip		
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?		X
7. Is the monument in good condition?	X	
8. Is the casing in good condition?	X	
9. Are there any odors (e.g., petroleum or sulfide/rotten egg)? If yes, describe the odor and intensity		X
10. Is there an oily sheen on the water?		X
11. Is the well dry?		X
12. Is there product in the well?		X
13. If so, product thickness NA.		
14. Is the well depth consistent with past depth measurements?	X	
15. Are there well protections? Type: NA		X

16. Previous well depth: 15.28'. Current well depth: 15.28' Hard Bottom

17. Depth to water: 6.49'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Note = W

√SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 EAGLE BAY Well No.: HMW-303-11

Inspector(s): BETH KOECHEL, JOHN HIGHSMITH Date/Time: 9/10/12 1335

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain Wind 45°

	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: Lin 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: Mild Petroleum BP 9/11/12	☒	☐
10. Is there an oily sheen on the water?	☐	☐
11. Is the well dry?	☐	☒
12. Is there product in the well? DTP = 26.68	☒	☐
13. If so, product thickness 0.02		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 32.08'. Current well depth: 32.05' Soft Bottom

17. Depth to water: 26.70'

18. PID reading at wellhead: 1.4 ppm Breathing Zone: 0.0ppm

Additional notes: Photo = 5

✓ SIW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Sturm Rd Eagle Bay Well No.: MW-305-7

Inspector(s): B Kercher, J Hightower Date/Time: 9/10/12 0912

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 45°

	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: Zinc Butterfly		
5. Specify size and number of bolts on flush-mount cap: 5 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: ~~33.52'~~ 33.53'. Current well depth: 33.53'. Soft Bottom

Previous well depth: 33.52' (JHW)

17. Depth to water: ~~37.52~~ BF 9/10/12 21.72'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = 2

√SIW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: T055

Site Name: SWMU 62 Eagle Bay Sample Location: MW-303-7

Inspector(s): B Giles / D Balmer Date/Time: 9/11/12 1250

Company: Seralaska

Weather/Temperature: Cloudy, breezy, cold 45°F

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 21.71' TOC

Total Depth of Well Below Top of Casing (feet): 33.53' TOC (2012)

Purge Method: Low flow peristaltic Intake at 27.6' TOC

Screen - 18.6 - 33.6' bgs
Sat. Scr. 21.7 - 33.5'

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 11.82

Gallons per Foot: 0.16 Gallons in Well: 1.89

Three Times Casing Volume: 5.67g Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: MW-303-7-2012

Time Sample Collected: 1330

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	1312	6.15	0.430	101.0	1.13	7.47	0.0	6
1.5	1317	6.16	0.434	0.0	0.00	7.18	0.0	-19
1.0	1322	6.10	0.430	6.5	0.00	7.03	0.0	-24
1.5	1327	6.10	0.426	5.1	0.00	7.13	0.0	-29
~~2.0~~	~~1332~~	SLW 9/11/12						

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 EAGLE BAY Well No.: MW-363-8

Inspector(s): BETH KORCHER, JOHN HIGHSTONE Date/Time: 9-10-12 | 0830

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 45°

	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		
5. Specify size and number of bolts on flush-mount cap: (3) 1/16" 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: 29.21'. Current well depth: 25.23'.

17. Depth to water: 22.82'

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: PHOTO = N

REMOVED ABSORBENT SOCK

√ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: ~~SWMU 62~~ Eagle Bay Well No.: MW-303-12

Inspector(s): B Kerlek, J Highstone Date/Time: 9/10/12 0840

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 45°

	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 Butterfly		
5. Specify size and number of bolts on flush-mount cap: 3 9/16 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	☐	☒
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: 31.85 Current well depth: 31.83		
17. Depth to water: 21.25		
18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm		

Additional notes: Photo = NW

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 102 Eagle Bay Well No.: MW-303/14

Inspector(s): B Kercher, J Highstone Date/Time: 9/10/12 0810

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 45°

	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		
5. Specify size and number of bolts on flush-mount cap: 3/8 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 NA		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 29.22' Current well depth: 29.13' Soft Bottom

17. Depth to water: 22.28

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes: Photo = N

/slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: RW503-4

Inspector(s): B Kercher / Highstone Date/Time: 9/10/12 0854

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 45°

	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: No Cap		
5. Specify size and number of bolts on flush-mount cap: No 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

BP 9/10

16. Previous well depth: 35.90. Current well depth: 35.83. Very Soft Bottom

17. Depth to water: 22.15

18. PID reading at wellhead: 0.1 ppm Breathing Zone: 0.0

Additional notes: Photo-5
Recovery well.

✓ SIW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Summer Eagle Bay Well No.: RW303-6

Inspector(s): B Kercher J Hofstone Date/Time: 9/10/12 908

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 45°

	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 in Slip PVC		
5. Specify size and number of bolts on flush-mount cap: No 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? Slight Sheen	☐	☒
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: 37.51. Current well depth: 37.52. Hard Bottom

17. Depth to water: 23.53

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Theo-3 Recovery well

JSW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: RW-303-7

Inspector(s): B. Kercher, J. Hightstone Date/Time: 9/10/12 0958

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain Wind 45°

	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?	☒ SLW 9/11/12	☒
4. Specify type of cap: 6" 8in PVC Slip Cap Not on, resting in casing BE 9/19		
5. Specify size and number of bolts on flush-mount cap: No 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 38.14. Current well depth: 38.15. Soft Bottom

17. Depth to water: 22.62' (Open Bayhawk) (SLW)

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes: Photo=.S
Recovery well

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: RW-303-9

Inspector(s): J Hightstone B Kercher Date/Time: 9/10/12 1030

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast Windy 45°

	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 3/8" in Slip Cap not on well, resting on Casing		
5. Specify size and number of bolts on flush-mount cap: Bolts Missing		
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? Minor Consistent with 2010	☐	☒
15. Are there well protections? Type: N/A	☐	☒

16. Previous well depth: 37.67 Current well depth: 37.73 Soft Bottom

17. Depth to water: 24.71

18. PID reading at wellhead: 0.0ppm Breathing Zone: 0.0ppm

Additional notes: Photo = 10
Recovery Well
2010 total depth was 38.61 ft.

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SW Mill 62 Eagle Bay Well No.: RW-303-13

Inspector(s): B Kerchee, J Hightstone Date/Time: 9/10/12 1112

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain, Wind 50°

	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 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? Sheen	☐	☒
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: 19.40. Current well depth: 19.41. Hard

17. Depth to water: 6.88

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = W

V SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Eagle Bay Sample Location: RW-303-13

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/11/12 1130

Company: Seelaska Environmental Services, LLC

Weather/Temperature: 48°F, light wind

Well Data

Diameter of Well Casing: 4"

Depth to Water Below Top of Casing (feet): 6.82

Total Depth of Well Below Top of Casing (feet): 19.41

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 12.59

Gallons per Foot: 0.65 Gallons in Well: 8.18

Three Times Casing Volume: 24.55 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: RW-303-13-2012

Time Sample Collected: 1210

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 .5	1149	6.13	0.186	1	7.12	9.70	0.0	195
1.0	1153	6.06	0.184	0	4.27	9.75	0.0	189
1.5	1157	6.03	0.185	0	4.14	9.73	0.0	186
2.0	1201	6.03	0.185	0	4.67	9.72	0.0	193

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID 0.0 ppm, wellhead 0.4 ppm

Fine black particulate seen at initial although to purge ½ gallon prior to connecting teflon cell. Start pump 1143.

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

✓ 3 lw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: RW-303-14

Inspector(s): B Giles / D Balmer Date/Time: 9/10/12 1345

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Cloudy, rain, breezy, 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: 4-in 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: Bollards - 3	☒	☐

16. Previous well depth: 19.45' TC. Current well depth: 18.80' very soft

17. Depth to water: 7.96' TC. No product

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0

Additional notes:

√SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Eagle Bay Sample Location: RW-303-14

Inspector(s): B Giles / D Belmar Date/Time: 9/10/12 1345

Company: Sealaska

Weather/Temperature: Cloudy, rain, breezy, 45°F

Well Data

Diameter of Well Casing: 4-in.

Depth to Water Below Top of Casing (feet): 7.96' tc.

Total Depth of Well Below Top of Casing (feet): 19.45' (2010) 18.8' (2012)

Purge Method: Low flow peristaltic Intake at 13.7' tc

Calculate if well parameters do not stabilize per the work plan: (using 2010 GB) Screen 4 - 17.9'
" 7 - 20' tc
Set Scr. 7.96 - 19.45
Intake - 13.7'

Length of Water Column in Well (feet): 11.49'

Gallons per Foot: 0.65g Gallons in Well: 7.47g

Three Times Casing Volume: 22.4g Gallons Purged from Well: 8.13g

Water Sample Data

Sample Number: RW-303-14-2012

Time Sample Collected: 1555

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): orange floc in water No sheen

Stabilized? ~~Yes~~ No SLW 9/12/12 3 Casing Volumes Removed? ~~NA~~ Yes SLW 9/12/12

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1400	5.78	0.219	3.1	0.96	7.30	0.0	175
.5	1405	5.72	0.196	0.0	0.00	7.29	0.0	155
1.0	1410	5.68	0.170	0.0	0.26	7.14	0.0	144
1.5	1415	5.59	0.152	6.6	0.71	7.19	0.0	143
2.0	1420	5.56	0.150	7.1	0.05	7.18	0.0	135
2.5	1425	5.56	0.151	8.1	0.04	7.20	0.0	128
3.0	1430	5.57	0.152	7.0	0.05	7.23	0.0	121
3.5	1435	5.63	0.155	14.4	0.23	7.22	0.0	108
4.0	1440	5.66	0.157	10.3	0.16	7.16	0.0	100
4.5	1445	5.63	0.160		0.23	7.13	0.0	98

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Began purging at 13:55 (0.5g/5min), 0.5 gallons purged continued on pg 2.

before initial field parameter readings. SLW

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

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Sample Location: RW-303-14

Inspector(s): B Giles / D Bidmar Date/Time: 9/10/12 1345

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Cloudy, rain, wind, cold

Well Data

Diameter of Well Casing:

Depth to Water Below Top of Casing (feet):

Total Depth of Well Below Top of Casing (feet):

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 (mm)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	1455	7.20	0.166	1.4	1.69	7.18	0.0	25
.33	1500	6.34	0.161	1.5	0.42	7.14	0.0	55
.66	1505	6.04	0.185	29.3	0.53	7.11	0.0	59
BR.99	1510	5.91	0.151	282.0	0.68	7.58	0.0	79
1.32	1515	5.90	0.155	256.0	0.80	7.48	0.0	79
1.65	1520	5.93	0.156	85.3	0.60	7.47	0.0	80
1.98	1525	5.89	0.158	62.2	0.41	7.40	0.0	75
2.31	1530	5.91	0.159	57.2	0.35	7.36	0.0	69
2.64	1535	5.92	0.160	20.9	0.42	7.39	0.0	66
2.97	1540	5.93	0.162	2.2	0.51	7.40	0.0	65
3.30	1545	5.94	0.164	2.2	0.54	7.45	0.0	63
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
NA		NA		NA				
3.63	1550	5.96	0.165	9.9	0.48	7.44	0.0	61
3.96	1555	sample collected						

9/10/12

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

JDW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: DW-303-15

Inspector(s): B Kerhoe, J Hightower Date/Time: 9/10/12 1012

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: 4 in 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: NA	☐	☒

16. Previous well depth: 34.10. Current well depth: 34.06. Soft Bottom

17. Depth to water: 27.67 ft. BP 9/10/12

18. PID reading at wellhead: 0.0 PPM Breathing Zone: 0.0ppM

Additional notes: Photo = SE
filter sock in well

V SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Eagle Bay Well No.: RW-303-16

Inspector(s): B Kercher - J Hofstetter Date/Time: 9/10/12 1130

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Rain Wind 45°

	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: N/A	☐	☒

16. Previous well depth: 17.46. Current well depth: 17.46 Hard

17. Depth to water: 7.92

18. PID reading at wellhead: 0.3 Breathing Zone: 2.0 ppm

Additional notes: Photo #W

✓ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Eagle Bay Sample Location: RW-303-16

Inspector(s): B Giles / D Balmer Date/Time: 9/11/12 0950

Company: Sealaska

Weather/Temperature: cloudy, windy, cold 45° F

Well Data

Diameter of Well Casing: 4-in.

Depth to Water Below Top of Casing (feet): 7.90' tc.

Total Depth of Well Below Top of Casing (feet): 17.46' tc (2012)

Purge Method: Low flow peristaltic Intake at 12.7' tc

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 9.56'

Gallons per Foot: 0.65g Gallons in Well: 6.21g

Three Times Casing Volume: 18.6g Gallons Purged from Well: 6.5g

Screen- 4.0 - 17.0' gs
" 9.0 - 20' tc
Sat Scr. 7.9 - 17.5
Intake - 12.7' tc

Water Sample Data

Sample Number: RW-303-16-2012

Time Sample Collected: 1120

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	1014	6.16	0.169	111.0	1.52	7.17	0.0	75
.5	1019	5.83	0.165	55.7	0.00	6.95	0.0	80
1.0	1024	5.74	0.165	36.1	0.00	6.94	0.0	77
1.5	1029	5.70	0.168	15.2	0.00	6.97	0.0	70
2.0	1034	5.62	0.170	7.3	0.00	7.01	0.0	68
2.5	1039	5.63	0.173	0.0	0.00	7.04	0.0	62
3.0	1044	5.67	0.178	0.0	0.00	7.07	0.0	56
3.5	1049	5.70	0.181	0.0	0.00	7.09	0.0	46
4.0	1054	5.77	0.186	0.0	0.00	7.11	0.0	37
4.5	1059	5.82	0.191	0.0	0.00	7.09	0.0	30
5.0	1104	5.85	0.193	0.0	0.00	7.06	0.0	23
TEST KIT RESULTS								
DO (ppm)		**Fe^{2+} (ppm)**		**CO_2 (ppm)**				
NA		NA		NA				
5.5	1109	5.88	0.198	0.0	0.00	7.10	0.0	18
6.0	1114	5.94	0.200	0.0	0.00	7.14	0.0	12
6.5	1119	5.98	0.203	0.0	0.00	7.12	0.0	9

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

Seep and Shoreline
Visual Inspection Checklist

Project Name: TO 55 Adak LTM 2012 Project No.: TO 55

Site Name: SWMU 62 East Canal Well No.: NA

Inspector(s): B Giles / D Balmer Date/Time: 9/11/12 1515

Company: Sealaska

Weather/Temperature: Cloudy, breezy, cold

		Yes	No
1.	Was a contaminated seep located? If yes, describe the seep (including length and width) and flow rate.	☒	☐

Seeps occur along 120-ft shoreline behind Boom 8. Pooled petroleum product behind one segment of boom, with petroleum sheen passing beyond boom - to be contained behind Boom 3.

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? Previously documented.		
4.	Are there any odors? If yes, describe odor and intensity	☒	☐

Fuel odor at boom at location.
DHB 9/11/12

5.	Is there vegetation growing at the seep location? Grasses	☒	☐
6.	Is the shoreline discolored by suspected contamination? If yes, describe appearance, location, and square footage	☒	☐

Black stained soil and vegetation along bank behind boom 8.

Orange stained sediment and orange floc in water extending downstream to culverts.

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:

√SW

Surface Water Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU62 Sample No.: NL-09-2012 [0425]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/11/12 1415

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, light wind, mist

		Yes	No
1.	Is there any sheen or visible contamination on or in the water? light sheening seen when accessing surface water location	☒	☐
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: 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.	☒	☐
	approx 75' upstream inside boom section black staining along shoreline, 3Ft x 100ft		
6.	Describe the sample (clear, colored, muddy, odors, etc.):		
	Clear water, sediment (when disturbed) went down stream away from sample location.		
7.	Is there vegetation growing nearby?	☒	☐
8.	Are there signs of wildlife use nearby (birds, fish, etc.)? shorebird, Ravin, teal	☒	☐
9.	Estimate volume of flow or stream size (width and depth) if sample collected from a stream or seep:		
	~~Estimate~~ 35Ft x 9" dep		
8.	Is erosion occurring? If yes, describe conditions and severity	☐	☒
9.	Is deposition occurring in the water body? If yes, describe conditions	☐	☒

Additional Notes: Black oil seepy inside boom section along shoreline approximately 100Ft up stream from sample location

✓ slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Eagle Bay Sample Location: NL-09

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/11/12 1415

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, light wind, mist

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: Grab

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-09-2012

Time Sample Collected: 1425

Sampling Method: Grab

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)
initial	1420	6.21	0.519	7	8.11	9.81	0.0	35

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

Sediment Sampling
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU62 Eagle Bay Sample No.: NL-09S-2012 [1445]

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/11/12 1435

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°, light wind, partial sun

		Yes	No
1.	Describe sediment appearance (color, grain size, organic matter, etc.). Is contamination suspected? ...	☒	☐

Dark grey sand with light organic matter (grass roots)

2. Are there any odors? If yes, describe the odor and intensity and if it is suspected contamination ..... ☒ ☐

Moderate smell of petroleum, approx 75' down stream of three boom sections/locations

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?.... ☒ ☐

No color change, but light sheeny after sediment was disturbed for sample.

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?..... ☒ ☐

Pa/, Raven seen near stream bed

Additional Notes:

9/12/12 - Collect sample NL-09SA-2012 [1000]
- for GRO & Dry Weight

/slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Swmu 62 Sandy Cove Well No.: 03-104

Inspector(s): B. Kercher, J. Highstone Date/Time: 9/8/11 0912

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast/48°

	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 Butterfly		
5. Specify size and number of bolts on flush-mount cap: 3 Bolts 9/16 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	☐	☒
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?	☒	☐ slw 9/14/12
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 24.35. Current well depth: 24.424. Soft Bottom

17. Depth to water: 19.48

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: Photo=N

PJ 9/13/12 Bolts=8

√slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: 03-104

Inspector(s): B. Giles / D. Balmer Date/Time: 9/10/12 1320

Company: Seralaska

Weather/Temperature: Cloudy, rain, breezy, cold 45°F

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 19.45' TC

Total Depth of Well Below Top of Casing (feet): 24.44 (2012)

Purge Method: Low flow peristaltic Intake at 22.0' TC

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 4.99'

Gallons per Foot: 0.16 g Gallons in Well: 0.80

Three Times Casing Volume: 2.40 g Gallons Purged from Well: 2.0

Screen – 16.0 - 26.0 gs
Salt Screen - 19.45 - 24.44
Intake - 21.95

Water Sample Data

Sample Number: 03-104-2012

Time Sample Collected: 1320

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	1255	6.45	0.410	9.3	0.64	6.48	0.0	39
.5	1300	6.25	0.413	0.0	0.00	6.45	0.0	21
1.0	1305	6.19	0.412	0.0	0.00	6.46	0.0	11
1.5	1310	6.16	0.414	0.0	0.00	6.46	0.0	7
2.0	1315	6.14	0.410	0.0	0.00	6.45	0.0	6

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

/s/w

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Sandy Cove Well No.: 03-155

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/8/12 0840

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, 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: 1.5" 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: NA	☐	☒

16. Previous well depth: 25.00 Ft btoc Current well depth: 25.00 Ft btoc (hard bottom)

17. Depth to water: 18.93 FTBTOC

18. PID reading at wellhead: 0.7 ppm Breathing Zone: 0.0 ppm

Additional notes: _____

√ slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: 03-155

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/8/12 / 0840

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, overcast, mist

Well Data

Diameter of Well Casing: 1½"

Depth to Water Below Top of Casing (feet): 18.93

Total Depth of Well Below Top of Casing (feet): 25.00 (rail) 25.00 (Hard bottom)

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.07 (rail DTB used)

Gallons per Foot: 0.10 Gallons in Well: 0.61

Three Times Casing Volume: 1.82 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: 03-155-2012

Time Sample Collected: 0925

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): light yellow color water, odorless

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	0859	5.85	0.259	17	2.21	6.86	0.0	66
.5	0903	5.87	0.272	21	1.80	6.80	0.0	47
1.0	0907	5.91	0.268	14	1.71	6.71	0.0	33
1.5	0911	5.94	0.262	5	1.55	6.69	0.0	23
2.0	0915	5.96	0.255	4	1.57	6.64	0.0	19
2.5	0919	5.97	0.253	1	1.61	6.65	0.0	15

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 0.0 ppm, well head PID: 0.7 ppm

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62, Sandy Cove Well No.: 03-619

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/8/12 0955

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 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" PVC slipcap		
5. Specify size and number of bolts on flush-mount cap: 1x 9/16" Bolt, 1x 9/16" Bolt missing		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? Slight 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: NA	☐	☒

16. Previous well depth: 22.07 ft btoc (2011) Current well depth: 22.15 ft btoc (30ft bottom)

17. Depth to water: 16.34 ft btoc

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes:

✓ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: 03-619

Inspector(s): ALewis. R. Boyd Date/Time: 9/8/12 0955

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 16.34

Total Depth of Well Below Top of Casing (feet): 22.07 (2011) 22.15 (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): 5.73 (2011 DTB used)

Gallons per Foot: 0.16 Gallons in Well: 0.92

Three Times Casing Volume: 2.75 Gallons Purged from Well: 2.5

Water Sample Data

Sample Number: 03-619-2012

Time Sample Collected: 1035

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	1007	6.21	0.624	8	1.22	6.89	0.0	55
.5	1011	6.25	0.622	7	0.57	6.60	0.0	67
1.0	1015	6.27	0.618	7	0.40	6.65	0.0	79
1.5	1019	6.30	0.612	5	0.27	6.71	0.0	86
2.0	1023	6.31	0.610	5	0.29	6.68	0.0	90
2.5	1027	6.30	0.606	8	0.28	6.67	0.0	95

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: MS/MSD on DRO

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Sandy Cove Well No.: 03-778

Inspector(s): B. Kercher, J Hilstone Date/Time: 9/8/12 1005

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast/48°

	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 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards (3)	☒	☐

16. Previous well depth: 27.60. Current well depth: 27.63. Soft Bottom

17. Depth to water: 19.53

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo=SW

v. -1w3

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SUMU 62 Sandy Cove Sample Location: 03-778

Inspector(s): B Giles / D Balmer Date/Time: 9/10/12 0930

Company: Sealaska

Weather/Temperature: Cloudy, breezy, occas. rain, cold ~45°F

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 19.50' TC

Total Depth of Well Below Top of Casing (feet): 27.63 (2012)

Purge Method: Low flow peristaltic Intake at 23.5' TC

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.13

Gallons per Foot: 0.16 g Gallons in Well: 1.30 g

Three Times Casing Volume: 3.90 g Gallons Purged from Well: 2.5

screen - 14.0 - 24.0 gs
" 17.5 - 27.5' TC
Solid Scr. 19.5 - 27.5 TC
Intake - 23.5' TC

Water Sample Data

Sample Number: 03-778-2012

Time Sample Collected: 1030

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	1000	5.89	0.517	7.2	3.35	5.76	0.0	12
.5	1005	6.35	0.507	0.0	0.00	5.71	0.0	-39
1.0	1010	6.37	0.461	7.8	0.00	5.61	0.0	-41
1.5	1015	6.35	0.443	0.0	0.00	5.54	0.0	-42
2.0	1020	6.36	0.436	0.0	0.00	5.52	0.0	-43
2.5	1025	6.36	0.437	9.6	0.00	5.54	0.0	-44

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

JJW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Sandy Cove Well No.: 03-802

Inspector(s): B Kercher J Highstone Date/Time: 9/8/12 1035

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 48°

	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 PVC Slip		
5. Specify size and number of bolts on flush-mount cap: 2 Bolts 9/16 1 is Broken		
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: 21.17. Current well depth: 20.68 (extremely Soft Bottom)

17. Depth to water: 16.60

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: Photo = ~~NE~~ FF 9/8 NW

✓ SIW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: 03-802

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/12 1025

Company: Sealaska Environmental Services, LLC.

Weather/Temperature: 51°F, overcast, moderate wind

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 16.54

Total Depth of Well Below Top of Casing (feet): 20.68 (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): 4.14

Gallons per Foot: 0.16 Gallons in Well: 0.66

Three Times Casing Volume: 1.99 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: 03-802-2012

Time Sample Collected: 1100

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): colorless 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	1038	5.86	0.171	44	7.01	5.87	0.0	63
.5	1042	5.92	0.175	31	6.55	5.81	0.0	78
1.0	1046	5.90	0.172	22	6.20	5.74	0.0	94
1.5	1050	5.84	0.170	19	6.04	5.68	0.0	107
2.0	1054	5.81	0.168	24	5.89	5.68	0.0	116

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SLOMH 02 Sandy Cove Well No.: 03-895

Inspector(s): B Kercher, J Highstone Date/Time: 9/8/12 0904

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast, Raining 45°

	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 PVC 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? 2010-27.73	☒	☐
15. Are there well protections? Type: Bollards(3)	☒	☐

16. Previous well depth: 27.91. Current well depth: 27.75. Hard Bottom

17. Depth to water: 21.54

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: Photo-S.

✓ JHJ

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: 03-895

Inspector(s): B Giles / D Balmer Date/Time: 9/10/12 0815

Company: Sealaska

Weather/Temperature: cloudy, breezy, cold ~45°F (SW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 21.52' TC

Total Depth of Well Below Top of Casing (feet): 27.75 (2012)

Purge Method: Low flow peristaltic Intake at 24.6' TC

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.23

Gallons per Foot: 0.16 g Gallons in Well: 0.99

Three Times Casing Volume: 2.99 g Gallons Purged from Well: 3.0 g

Screen - 14.75 - 24.75 bgs
Sat. Sc. 17.75 - 27.75 TC
21.52 - 27.75' TC
Intake - 24.6'

Water Sample Data

Sample Number: 03-895-2012

Time Sample Collected: 0905

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): None

Stabilized? ~~Not yet~~ Yes 3 Casing Volumes Removed? YES

stabilized at 3 casing volumes removed (SW)

Purge Vol. (gallons)	Time (min)	pH (pH units)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (C)	Salinity (%)	Redox (mv)
INITIAL	0831	5.67	0.233	4.3	5.74	4.75	0.0	243
.5	0839	5.58	0.158	0.9	5.06	4.65	0.0	265
1.0	0844	5.46	0.149	4.4	5.62	4.59	0.0	282
1.5	0849	5.39	0.144	9.6	5.57	4.48	0.0	293
2.0	0854	5.30	0.143	5.3	5.81	4.50	0.0	303
2.5	0859	5.29	0.144	9.0	6.01	4.48	0.0	306
3.0	0904	5.28	0.146	7.6	5.81	4.50	0.0	311

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

/ SIW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Sandy Cove Well No.: HMW-102-1

Inspector(s): B Kercher, J Hufstetler Date/Time: 9/8/12 0938

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Raining 45°

	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 Butterfly		
5. Specify size and number of bolts on flush-mount cap: 3 Bolts 9/16" 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	☐	☒
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: 25.57. Current well depth: 25.51. Soft Bottom

17. Depth to water: 19.38

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = NW

√ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Sandy Cove Well No.: HMW-1246-1

Inspector(s): B Kercher J Highstone Date/Time: 9/8/12 1105

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 48°

	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. + Butterfly.		
5. Specify size and number of bolts on flush-mount cap: 3 Bolts 9/16 in 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	☐	☒
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?	~~N~~ ☒	SW 9/10/12
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 22.26. Current well depth: 22.15 Soft Bottom

17. Depth to water: 16.64

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = W

SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Sandy Cove Well No.: HMW-1262-3

Inspector(s): B Kercher J Highstone Date/Time: 9/8/12 1020

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 48°

	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 Butterfly		
5. Specify size and number of bolts on flush-mount cap: 3 Bolts 9/16 in 2 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	☐	☒
10. Is there an oily sheen on the water?	☒	☐
11. Is the well dry?	☐	☒
12. Is there product in the well? Light Sheen	☒	☐
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: 24.32 . Current well depth: 24.54 Silt Bottom

17. Depth to water: 16.25

18. PID reading at wellhead: 2.2 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = NE

✓ SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: HMW-146-3

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/12 1400

Company: Seaklaska Environmental Services, LLC

Weather/Temperature: 49°, moderate wind, heavy Rain

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 16.20

Total Depth of Well Below Top of Casing (feet): 24.54

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 8.34

Gallons per Foot: 0.16 Gallons in Well: 1.33

Three Times Casing Volume: 4.00 Gallons Purged from Well: 1.5

Water Sample Data

Sample Number: HMW-146-3-2012

Time Sample Collected: 1435

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	1413	6.19	0.356	12	0.72	6.36	0.0	-27
.5	1417	6.22	0.352	9	0.00	6.14	0.0	-38
1.0	1421	6.24	0.352	9	0.00	6.12	0.0	-43
1.5	1425	6.24	0.352	9	0.00	6.11	0.0	-46

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 0.0 ppm, wellhead: 2.9 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

✓ siw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Sandy Cove Well No.: MRP-MW2

Inspector(s): B Kercher, J Hilgestone Date/Time: 9/8/12 0952

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast Rainy 48°

	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		
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: Medium 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards (3)	☒	☐

16. Previous well depth: 27.91. Current well depth: 27.93 Soft Bottom

17. Depth to water: 27.38

18. PID reading at wellhead: 0.4 Breathing Zone: 0.0

Additional notes: Photo = SE

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: MRP-MW2

Inspector(s): B Giles / D Balmer Date/Time: 9/8/12 1255

Company: Sealaska

Weather/Temperature: cloudy, breezy, cold 48°F

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 21.33' tc

Total Depth of Well Below Top of Casing (feet): 24.93' tc (2012) 27.92' our measurement

Purge Method: Low flow peristaltic Intake at 23.1' tc

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 3.6'

Gallons per Foot: 0.16 5 Gallons in Well: 0.58

Three Times Casing Volume: 1.73 9 Gallons Purged from Well: 2.31

Screen - 15.3 - 24.8 95
16.3 - 25.8 tc.
Sat screen 21.3 - 24.9
Intake - 23.1'

Water Sample Data

Sample Number: MRP-MW2-2012

Time Sample Collected: 1350

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): Orange floc in 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	1319	6.06	0.363	54.8	6.85	6.91	0.0	30
.33	1323	6.17	0.368	23.7	0.51	6.71	0.0	-8
.66	1327	6.10	0.398	31.8	2.28	6.87	0.0	-19
.99	1331	6.15	0.429	60.6	0.40	6.77	0.0	-21
1.32	1335	6.14	0.436	61.2	0.20	6.78	0.0	-21
1.65	1339	6.13	0.442	37.6	0.16	6.74	0.0	-22
1.98	1343	6.11	0.449	0.0	0.04	6.78	0.0	-22
2.31	1347	6.10	0.462	9.4	0.00	6.80	0.0	-24

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: DTB measurement is questionable due to iron goo collecting in well. Soft goo at 24.9' - broke through.

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Sewall's Sandy Cove Well No.: MRP-MW-3

Inspector(s): B Kerdoon, J Hightstone Date/Time: 9/8/12 0950

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast, Rain 45°

	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		
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: Mild 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: Bollards (3)	☒	☐

16. Previous well depth: 10.62. Current well depth: 10.62. Hard Bottom

17. Depth to water: 7.67

18. PID reading at wellhead: 0.2 ppm Breathing Zone: 0.0 ppm

Additional notes: Photos = SS

JSW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: MRP-MW3

Inspector(s): BGiesi / DBalmer Date/Time: 9/8/12 1405

Company: Sealaska

Weather/Temperature: cloudy, lt. rain, breezy, cold ~50°F (SLW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): 7.66' to

Total Depth of Well Below Top of Casing (feet): 10.62' TOC (2012) 10.64' checked.

Purge Method: Low flow peristaltic Intake at 9.1' TOC

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 2.96'

Gallons per Foot: 0.16 g Gallons in Well: 0.47 g

Three Times Casing Volume: 1.42 g Gallons Purged from Well: 1.65 g

screen - 3.8 - 8.3 gs
" 5.8 - 10.3 gs
Set screen 7.66 - 10.6'
Intake - 9.1'

Water Sample Data

Sample Number: MRP-MW3-2012

Time Sample Collected: 1445

Sampling Method: low flow peristaltic

Remarks (Color/Odor): sulfurous odor in water.

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)
IN. TUBE	1423	7.41	0.311	0.0	1.59	8.96	0.0	-16
.33	1427	6.54	6.321	0.0	0.00	8.62	0.0	-18
.66	1431	6.32	0.315	0.0	0.00	8.62	0.0	-19
.99	1435	6.23	0.314	0.0	0.00	8.54	0.0	-21
1.32	1439	6.18	0.316	0.0	0.00	8.45	0.0	-22
1.65	1443	6.17	0.313	0.0	0.00	8.47	0.0	-22

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: PID - 142 ppm 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

./SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Sandy Cove Well No.: MW-107-1

Inspector(s): B Kercher J Hightstone Date/Time: 9/8/12 1245

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast Raining 50°

	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 Butterfly		
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? DTP= 18.21	☒	☐
13. If so, product thickness 0.01.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: NA	☐	☒

16. Previous well depth: 29.00. Current well depth: 29.06.

17. Depth to water: 18.22

18. PID reading at wellhead: 0.4 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = NE

✓ SMJ

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: MW-107-1

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/12 0920

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51°F, overcast, rain

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 18.18

Total Depth of Well Below Top of Casing (feet): 29.06

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 10.88

Gallons per Foot: 0.16 Gallons in Well: 1.74

Three Times Casing Volume: 5.22 Gallons Purged from Well: 3.0

Water Sample Data

Sample Number: MW-107-1-2012

Time Sample Collected: 1005

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): light yellow color, moderate 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 1.5	0946	6.19	0.397	11	0.23	6.19	0.0	-17
2.0	0950	6.13	0.398	10	0.00	6.15	0.0	-22 AL -23
2.5	0954	6.12	0.401	7	0.00	6.15	0.0	-21, -26
3.0	0958	6.13	0.404	8	0.00	6.15	0.0	-29

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 0.0 ppm, wellhead: 1.9 ppm

Allowed well to purge ~1.5 gallons prior to connecting to flow cell. Yellow/orange particle seen floating inside flowcell's purge bucket (right). Start pump at 0931

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

1 of 2

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Sewell & Sandy Cove Well No.: MW134-10

Inspector(s): B Beecher J Hightower Date/Time: 9/8/12 1315

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast ~48° 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 in Slip		
5. Specify size and number of bolts on flush-mount cap: No Monument NA		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? NA	☐	☐
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: 22.45. Current well depth: 22.46. Set Bottom

17. Depth to water: 17.31

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = N

√SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 8 Sandy Cove Well No.: MW 134-11

Inspector(s): B Kerslake J Highstone Date/Time: 9/8/12 1305

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 50°

	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 Butterfly		
5. Specify size and number of bolts on flush-mount cap: 3 Bolts 9/16 in All 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	☐	☒
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: 21.60. Current well depth: 21.56. Hard Bottom

17. Depth to water: 18.01

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = NW

√ sku

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62, Sandy Cove Sample Location: MW-134-11

Inspector(s): A Lewis, R. Boyd Date/Time: 9/7/12 1330

Company: Seaflaska Environmental Services, LLC

Weather/Temperature: 51°F, light wind, mist

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 18.10

Total Depth of Well Below Top of Casing (feet): ~~18.46 8/26/12~~ 21.60 (2011) 21.56 (2012) ED

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 3.50 (2011 DTB used)

Gallons per Foot: 0.16 Gallons in Well: 0.56

Three Times Casing Volume: 1.68 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: MW-134-11-2012

Time Sample Collected: 1405

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): odorless 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	1342	6.39	0.933	12	1.27	7.30	0.0	-69
.5	1346	6.38	0.931	9	0.85	7.26	0.0	-72
1.0	1350	6.38	0.930	9	0.81	7.25	0.0	-75
1.5	1354	6.38	0.930	8	0.75	7.19	0.0	-78
2.0	1358	6.39	0.927	7	0.61	7.18	0.0	-80

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes: Breathing zone PID: 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

1 of 3

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: SWMU 62 Sandy Cove Well No.: MW146-1

Inspector(s): B Kercher, J Highstone Date/Time: 9/8/12 1115

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 48°

	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 Slip		
5. Specify size and number of bolts on flush-mount cap: 3 Bolts 9/16 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	☐	☒
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: 19.58. Current well depth: 19.58. Hard Bottom

17. Depth to water: 17.12

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = 10

1/5/13

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: MW-146-1

Inspector(s): BGiles / D Balmer Date/Time: 9/10/12 1610

Company: Seal aska

Weather/Temperature: cloudy, rain, windy 45° F

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 17.09' TC

Total Depth of Well Below Top of Casing (feet): 19.58' (2012)

Purge Method: Low flow peristaltic Intake at 18.3'

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 2.49'

Gallons per Foot: 0.16 g Gallons in Well: 0.40

Three Times Casing Volume: 1.20 Gallons Purged from Well: 1.0

Screen - ? 17.09 - 19.58
Intake - 18.3

Water Sample Data

Sample Number: MW-146-1-2012

Time Sample Collected: 1650

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	1637	6.03	0.411	0.0	1.55	7.72	0.0	35
.33	1641	6.01	0.414	0.0	0.00	7.67	0.0	21
.66	1645	6.00	0.415	0.0	0.00	7.65	0.0	16
.99	1649	5.99	0.416	0.0	0.00	7.64	0.0	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

JSW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Swmu 62 Sandy Cove Well No.: MW187-1

Inspector(s): B Kercher J Hilstone Date/Time: 9/8/12 1255

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast 50°

	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 Slip Cap.		
5. Specify size and number of bolts on flush-mount cap: 3 Bolts 9/16 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	☐	☒
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: 22.29 . Current well depth: 22.31 .

17. Depth to water: 9.85

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = NW

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62, Sandy Cove Sample Location: MW-187-1-2012

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/7/12 1500

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 51° F, light wind, mist

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 19.03

Total Depth of Well Below Top of Casing (feet): 22.29 (2011) 22.34 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): ~~3.26~~ (2011 DTB used) 3.26

Gallons per Foot: 0.16 Gallons in Well: 0.52

Three Times Casing Volume: 1.56 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: MW-187-1-2012

Time Sample Collected: 1540

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	1513	6.16	0.463	4	1.21	6.85	0.0	-8
.5	1517	6.19	0.485	8	0.00	6.72	0.0	-24
1.0	1521	6.22	0.502	7	0.00	6.68	0.0	-33
1.5	1525	6.24	0.515	5	0.00	6.66	0.0	-39
2.0	1529	6.29	0.532	7	0.00	6.61	0.0	-50

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 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

✓ slw

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO55

Site Name: SWMU 62 Sandy Cove Sample Location: MW-187-1

Inspector(s): A. Lewis, R. Boyd Date/Time: 9/10/12 0820

Company: Sealaska Environmental Services, LLC

Weather/Temperature: 50°F, overcast

Well Data

Diameter of Well Casing: 2"

Depth to Water Below Top of Casing (feet): 19.02

Total Depth of Well Below Top of Casing (feet): 22.34

Purge Method: low-flow peristaltic

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 3.32

Gallons per Foot: 0.16 Gallons in Well: 0.53

Three Times Casing Volume: 1.59 Gallons Purged from Well: 2.0

Water Sample Data

Sample Number: MW-187-1-A-2012

Time Sample Collected: 0900

Sampling Method: low-flow peristaltic

Remarks (Color/Odor): clear, odorless water

Stabilized? ND 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	0841	6.24	0.481	5	0.84	6.21	0.0	C
1.5	0845	6.18	0.457	3	0.00	6.05	0.0	-24
1.0	0849	6.20	0.465	Ø	0.00	6.02	0.0	-46
1.5	0853	6.24	0.471	Ø	0.00	6.03	0.0	-56
2.0	0857	6.26	0.485	1	0.00	6.05	0.0	-63

TEST KIT RESULTS

DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
N/A		N/A		N/A				

Notes: Breathing zone PID: 0.0 ppm wellhead: 0.4 ppm

Collected Benzene only, previously collected DRO

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

√ SWD

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Seward Sandy Cove Well No.: RW-102-4

Inspector(s): B. Kracher, J. Highstone Date/Time: 9/8/12 0932

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast Rain 48°

	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"&8" PVC Slip OR FJT9		
5. Specify size and number of bolts on flush-mount cap: No 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 NA.		
14. Is the well depth consistent with past depth measurements?	☒	☐
15. Are there well protections? Type: Bollards(3) 1 is uprooted and on its side	☒	☐

16. Previous well depth: 33.33. Current well depth: 33.32. Hard Bottom

17. Depth to water: 19.14

18. PID reading at wellhead: 0.0 ppm Breathing Zone: 0.0 ppm

Additional notes: Photo = W

1 of 3

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKERSHED Well No.: 04-175

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12 / 1556

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, HEAVY RAIN, 25 mph WIND, 45°

	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) 5/16" BOLTS - ALL 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	☐	☒
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: 14.45. Current well depth: 14.42.

17. Depth to water: 6.96'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 SECURE FACING NORTH

✓ SLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Tinkar Shed Sample Location: 04-175

Inspector(s): B Giles / D Balmer Date/Time: 9/7/12 1330

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Overcast, misty, breezy, cold ~50° F SLW

Well Data

Diameter of Well Casing: 4-in

Depth to Water Below Top of Casing (feet): 6.56' tc.

Total Depth of Well Below Top of Casing (feet): 14.42' tc

Purge Method: Low flow peristaltic Intake at 10.5' tc.

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.86

Gallons per Foot: 0.65g Gallons in Well: 5.11g

Three Times Casing Volume: 15.3g Gallons Purged from Well: 2.0g

Screen - 5-15' BS
Sat Screen - 6.56 - 14.42
Intake - 10.5' tc.

Water Sample Data

Sample Number: 04-175-2012

Time Sample Collected: 1420

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)
IN-TIAL	1355	7.24	0.313	14.1	2.78	8.57	0.0	-18
.5	1400	6.33	0.325	99.0	0.00	8.61	0.0	-25
1.0	1405	6.17	0.327	94.5	0.00	8.85	0.0	-32
1.5	1410	6.17	0.326	97.0	0.00	8.89	0.0	-35
2.0	1415	6.17	0.326	91.8	0.00	8.94	0.0	-37

TEST KIT RESULTS								
DO (ppm)		Fe^{2+} (ppm)		CO_2 (ppm)				
NA		NA		NA				

Notes:

Well Casing Volumes

GAL/FOOT ¼" = 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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKERSHED Well No.: 04-176

Inspector(s): JOHN HIGHSTONE Date/Time: 8·31·12 / 1124

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 25 mph WIND, 45°

	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) 9/16" BOLTS - ALL 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	☐	☒
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: 14.29'. Current well depth: 14.27'.

17. Depth to water: 7.11'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING NORTH

✓ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: 04-178

Inspector(s): JOHN HIGHSTONE Date/Time: 5/31/12 / 1611

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 25 MPH WIND, 45°

	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) 1/2" BOLTS - BOTH 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	☐	☒
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: 12.00'. Current well depth: 11.96'.

17. Depth to water: 7.02'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.6

Additional notes: HARD BOTTOM

1 PICTURE FACING NORTH

√ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: 04-290

Inspector(s): JOHN HIGHSTONE Date/Time: 8·31·12 / 0925

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, FOG/MIST, 20 MPH WIND, 45°

	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) 9/16" BOLTS - 1 BENT		
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: 14.69'. Current well depth: 14.72'.

17. Depth to water: 7.41'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING NORTH

√SW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Tanker Shed Sample Location: 04-290

Inspector(s): BGiles / D Balmer Date/Time: 9/7/12 1005

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Cloudy, misty, breezy, cold ~50° F (LW)

Well Data

Diameter of Well Casing: 2-in.

Depth to Water Below Top of Casing (feet): ~~TD~~ 6.97' tc

Total Depth of Well Below Top of Casing (feet): 14.72' tc

Purge Method: Low flow peristaltic Intake at 10.5' tc.

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.75'

Gallons per Foot: 0.16 g Gallons in Well: 1.24 g

Three Times Casing Volume: 3.72 g Gallons Purged from Well: 2.5

Screen - 3-13'95
Sat Screen 6.97 - 14.
Intake - 10.5'

Water Sample Data

Sample Number: 04-290-2012 and 04-300-2012 (Dup)

Time Sample Collected: 1055 1105

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	1027	6.26	0.272	35.6	0.14	8.32	0.0	5
.5	1032	6.23	0.284	50.6	0.00	8.37	0.0	-4
1.0	1037	6.23	0.288	85.5	0.00	8.36	0.0	-6
1.5	1042	6.23	0.290	98.2	0.00	8.37	0.0	-7
2.0	1047	6.22	0.288	95.2	0.00	8.32	0.0	-8
2.5	1052	6.21	0.286	98.5	0.00	8.36	0.0	-9

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKERSHED Well No.: DH-301

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12 / 1644

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 25 MPH WIND, 45°

	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) 5/16" BOLTS - BOTH 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	☐	☒
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: 13.29. Current well depth: 13.28.

17. Depth to water: 7.06'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING WEST

✓ SHW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKERSHED Well No.: 04-302

Inspector(s): JOHN HEGHSTONE Date/Time: 8-31-12 / 1143

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 25 mph WIND, 45°

	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 SLIP		
5. Specify size and number of bolts on flush-mount cap: NO BOLTS, (2) BROKEN OFF		
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: 13.21'. Current well depth: 13.38'.

17. Depth to water: 7.82'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING WEST

√ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKFARM SHED Well No.: 04-303

Inspector(s): JOHN HITCHSTONE Date/Time: 8.31.12 / 1634

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 25 mph WIND, 45°

	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 - BOTH 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	☐	☒
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: 12.93', Current well depth: 12.85'.

17. Depth to water: 10.83'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING NORTH

√ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKFARM HILL Well No.: 04-304

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12 / 1041

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, WIND 20 MPH, 45°

	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 - STRIPPED OUT		
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: 13.94. Current well depth: 13.95'.

17. Depth to water: 7.03'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING WEST

√ SLW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: 04-306

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12 / 1052

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 25 MPH WIND, 45°

	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?	☑	☐
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: 13.04'. Current well depth: 13.02'.

17. Depth to water: 7.31'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM
1 PICTURE FACING EAST

JSW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Tanker Shoal Sample Location: 04-306

Inspector(s): BGiles / D Balmer Date/Time: 9/7/12 1215

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Cloudy, misty, breezy, cold ~50° F

Well Data

Diameter of Well Casing: 6 in

Depth to Water Below Top of Casing (feet): 6.58' tc

Total Depth of Well Below Top of Casing (feet): 13.02' tc

Purge Method: Low flow peristaltic Intake at 10.0' tc.

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 6.44' tc

Gallons per Foot: 1.46 g Gallons in Well: 8.96 g

Three Times Casing Volume: 26.9 g Gallons Purged from Well: 3.5

Screen 3-13 gs
Sit Screen 6.58-13.0 gs
Intake - 9.95'

Water Sample Data

Sample Number: 04-306-2012 and 04-316-2012 (Dup)

Time Sample Collected: 1305 1315

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	1236	6.06	0.364	0.0	0.00	8.62	0.0	22
.5	1240	6.00	0.342	0.0	0.00	8.55	0.0	10
1.0	1244	5.99	0.333	5.3	0.00	8.51	0.0	3
1.5	1248	6.00	0.328	-59.2	0.00	8.55	0.0	3
2.0	1252	5.96	0.314	67.3	0.00	8.56	0.0	-1
2.5	1256	5.97	0.314	80.7	0.00	8.61	0.0	-3
3.0	1300	5.98	0.314	83.0	0.00	8.62	0.0	-5
3.5	1304	5.99	0.315	85.0	0.00	8.64	0.0	-6

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

Monitoring Well (Groundwater) Gauging
Visual Inspection Check t

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKERSHED Well No.: DA-307

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12 / 1026

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, FOG/MIST, 20 MPH WIND ; 45°

	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: (1) 1/2" BOLT + (1) 9/16" BOLT		
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: 13.95' Current well depth: 13.95'

17. Depth to water: 7.21

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING NORTH

√ 5W3

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANGERSHED Well No.: 04-308

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12/1342

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, HEAVY RAIN, 25 MPH WIND, 45°

	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?	☒	☐
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: 14.05'. Current well depth: 14.07'.

17. Depth to water: 7.25'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

(1) PICTURE FACING NORTH

✓ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: 04-309

Inspector(s): JOHN HIGHSTONE Date/Time: 8-31-12 / 1013

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, FOG/MIST, 20 mph WIND, 45°

	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 BROKEN OFF		
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: 14.04'. Current well depth: 14.06'.

17. Depth to water: 10.92'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM
1 PICTURE FACING NORTH

✓ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: CH-310

Inspector(s): JOHN HIGHSTONE Date/Time: 8 31/12/13 18

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, 25 mph WIND, HEAVY RAIN, 45°

	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:		
6. Is there any evidence of tampering with the cap or well casing? * SEE BELOW	☒	☐
7. Is the monument in good condition? * SEE BELOW	☐	☒
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: 14.04'. Current well depth: 14.03'.

17. Depth to water: 7.02'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

1 PICTURE FACING NORTH

* CONCRETE AND METAL CASING AND LID ALL BROKEN IN PIECES. DAMAGE DUE TO POSSIBLE METAL SALVAGE CONTRACTOR DOING WORK IN VACINITY OF WELL.

JSW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: 04-311

Inspector(s): JOHN HIGHSTONE Date/Time: 8 31 12 / 1405

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 25 MPH WIND, 45°

	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?	☒	☐
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: 13.00. Current well depth: 13.05'.

17. Depth to water: 10.64'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1. PICTURE FACING NORTH

✓ slw

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: D4-312

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12 / 1356

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 25 MPH WIND, 45°

	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) 5/16" 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: 12.88'. Current well depth: 12.95'.

17. Depth to water: 6.93'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING WEST

✓ SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: 04-313

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12 / 1622

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 25 mph WIND, 45°

	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) 1/2 BOLTS - WRONG SIZE FOR HOLES		
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: 13.36'. Current well depth: 13.38'.

17. Depth to water: 6.97'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING NORTH

✓ JW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: 04-314

Inspector(s): JOHN HEIGHSTONE Date/Time: 8.31.12 / 1420

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, RAIN, 25 MPH WIND, 45°

	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 - (1) IS 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	☐	☒
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: 12.95'. Current well depth: 12.93'.

17. Depth to water: 6.94'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM
1. PICTURE FACING NORTH

JDW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: 04-317

Inspector(s): JOHN HUGHSTONE Date/Time: 8.31.12 / 0954

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, FOG/MIST, 20 mph WIND, 45°

	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) 9/16" BOLTS - (1) MISSING		
6. Is there any evidence of tampering with the cap or well casing?	☐	☒
7. Is the monument in good condition? MONUMENT COLLAR BROKEN	☒	☐
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: 14.35'. Current well depth: 14.52'.

17. Depth to water: 7.20'

18. PID reading at wellhead: 0.6 Breathing Zone: 0.6

Additional notes: HARD BOTTOM

1 PICTURE FACING NORTH

JHW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SPIT Well No.: 04-601

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12 / 0850

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, FOG, MIST, 20 mph WIND 45°

	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 BALLARDS	☒	☒
16. Previous well depth: 17.84'. Current well depth: 17.83' TC.		
17. Depth to water: 10.95'		
18. PID reading at wellhead: 0.0 Breathing Zone: 0.0		

8/31/12

Additional notes: SOFT BOTTOM

1 PICTURE FACING WEST

JSLW

WATER SAMPLING LOG

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: Tanker Shed Sample Location: 04-601

Inspector(s): BG:les / D Balmer Date/Time: 9/7/12 0840

Company: Sealaska Environmental Services, LLC

Weather/Temperature: Partly cloudy, breezy, cold ~50° F

Well Data

Diameter of Well Casing: 2-in

Depth to Water Below Top of Casing (feet): 10.22'

Total Depth of Well Below Top of Casing (feet): 17.83' tc.

Purge Method: Low flow peristaltic Intake at 13.8' tc

Calculate if well parameters do not stabilize per the work plan:

Length of Water Column in Well (feet): 7.61'

Gallons per Foot: 0.16 g Gallons in Well: 1.22 g

Three Times Casing Volume: 3.65 g Gallons Purged from Well: 4.0 g

Screen - 4.5 - 14.5' gs
7.5 - 17.5' tc
Sch Screen 10.2 - 17.5' tc
Intake - 13.8' tc

Water Sample Data

Sample Number: 04-601-2012

Time Sample Collected: 0945

Sampling Method: Low flow peristaltic

Remarks (Color/Odor): None

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)
IN. TIAL	0902	5.79	0.229	91.3	12.24	7.48	0.0	223
.5	0907	6.05	0.219	94.0	11.12	7.30	0.0	223
1.0	0913	6.04	0.219	96.0	10.97	7.29	0.0	200
1.5	0917	6.03	0.216	101.0	11.68	7.30	0.0	170
2.0	0922	6.05	0.220	107.0	10.50	7.32	0.0	141
2.5	0927	6.06	0.220	106.0	11.35	7.33	0.0	121
3.0	0932	6.07	0.221	108.0	11.00	7.32	0.0	113
3.5	0937	6.09	0.221	108.0	11.00	7.30	0.0	109
4.0	0942	6.10	0.225	110.0	11.03	7.32	0.0	106

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

JSW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKERSHED Well No.: TS-03

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12 / 0908

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, FOG, LIGHT RAIN, 20 mph WIND, 45°

	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) 9/16" BOLTS - BOTH BROKEN OFF		
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: 12.71'. Current well depth: 12.71'.

17. Depth to water: ~~12.71'~~ 8.31.12 10.67'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: HARD BOTTOM

1 PICTURE FACING WEST

1/SW

Monitoring Well (Groundwater) Gauging
Visual Inspection Checklist

Project Name: 2012 Adak Long-Term Monitoring Project No.: TO 55

Site Name: TANKER SHED Well No.: TS-04

Inspector(s): JOHN HIGHSTONE Date/Time: 8.31.12 / 0938

Company: Sealaska Environmental Services, LLC

Weather/Temperature: OVERCAST, FOG/MIST, 20 mph WIND, 45°

	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		
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: 12.66' . Current well depth: 12.66' .

17. Depth to water: 6.11'

18. PID reading at wellhead: 0.0 Breathing Zone: 0.0

Additional notes: SOFT BOTTOM

(1) PICTURE FACING WEST

√ 2w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ALL-WEATHER
JOURNAL
№ 390N
ADAK TOSS 2012 LTM
~~TEAM~~ AL 2 H.S
Start: 4 AUG T
End: 13 SEPTEMBER

Book: ~~Project Management~~ Health + Safety BP 12/19/12

Project: Adak LTM 2012

Contract: N44255-09-D-4005

~~Project~~ TASK ORDER: 1055
DATE 12-19-12

Navy Installation = Former Naval Complex Adak, AK

Site Name: OU A

Start date: 7-~~24~~ 23-12

End date: ~~9/12/12~~ 9/24/12

Book Assignment: ~~Project Management~~ Health and Safety Brian Giles TBR 12/19

Company: Seabasha Environmental Services

Address: 18743 Front St NE floor 2
Poulsbo, WA 98370

Phone: 360-930-3300

Reviewed by: Keith Jay - Tom

Review Date: 12-19-12

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JOURNAL
FIELD BOOK

Name HEALTH & SAFETY
Brian Giles

Address

Phone

Project TO 55 ADAK LTM 2012

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TO 55 ADAK LTM 2012
24 AUGUST 2012
0900 SAFETY/WORK PLAN MTGS.
PREVIOUS SITE PREP WORK
DONE UNDER TO 56 SAFETY PLAN.
DISCUSSED WIND AWARENESS/
WIND VARIABILITY, DOOR 'ETIQUETTE'.
REVIEW COMMUNICATIONS BY
CELL AND RADIO. THERE ARE
TWO CELL TOWERS, ONE
NEAR SATELLITE DISHES
IN TOWN AND ONE ATOP
WHITE ALICE. REVIEWED
SITE ORIENTATION.
B. [illegible] GILL
CONT. →

TO 55 ADAK LTM 2012
24 AUGUST 2012 CONT.
DISCUSSED OFF HOURS 'EXPLORATION' AND SAFETY - USE BUDDY SYSTEM AND TELL SOMEONE YOUR DESTINATION. DISCUSSED DRIVING STYLES OF ISLAND RESIDENTS -VS- NEWCOMERS, LACK OF STOP SIGNS, CENTERLINES. VEHICLE SAFETY. EARTHQUAKE FREQUENCY ON ADAK AND POTENTIAL FOR TSUNAMIS, SIREN FOR ALERTS. IMPORTANCE OF SMOKE/CARBON MONOXIDE DETECTORS. FOLLOWING THE MEETING WE VISITED THE COMMUNITY CENTER AND CLINIC, TALKED WITH PHONE TECH 'BIG MIKE' WHO GOT PHONES OPERATIVE. ALSO TALK TO 'LAYTON', WHO SAID A TSUNAMI DRILL WOULD HAPPEN
8/24/12
B. Gill

TO 55 ADAK LTM 2012
25 AUGUST 2012
0900 SAFETY MTG. WE REVIEWED IMPORTANCE OF COMMUNICATIONS WITH CELL OR RADIO. WIND AWARENESS / DOOR-VEHICLE AWARENESS. REVIEW APPROPRIATE PPE FOR TASKS.
1510 VANS EQUIPED WITH FIRE EXTINGUISHERS, SPILL KITS FIRST AID AND EYEWASH KITS.
~~27~~ 3C Brad Giles 8/25/12
27 AUGUST 2012
0700 HTS MEETING, WIND AWARENESS 'DON'T BE THE ONE TO FORGET'. PPE. SLIPS, TRIPS AND FALLS, SPECIFIC TO SITE AND AFTER ISLAND-WIDE 'CLEAN UP'. PARKING ON ROADS / NEAR ROADS USE BLINKERS, WEAR ORANGE VESTS. EMPTY PURGE WATER BARREL BEFORE WEIGHT IS PROBLEM.
Brad Giles 8/27/12

TO 55 ADAK LTM 2012
28 AUGUST 2012
0700 SAFETY MTG. REVIEWED WIND AND VEHICLE SAFETY. SLIPS, TRIPS AND FALLS, SPECIFICALLY REGARDING SHORELINE. USE OF LIFE PRESERVERS, WHICH MAY COME IN HANDY AS PADDING IF LOSS OF FOOTING OCCURS ON ROCKS AT BEACH. PPE.
1200 THE TSUNAMI WARNING SIREN WAS EXTREMELY AUDIBLE AT NMCB. SEVERAL 'PRODUCT' WELLS HAD HIGH (300+) ppm READINGS BUT LITTLE OR NO DETECTIONS AT BREATHING ZONE.
Brad Giles 8/28/12
29 AUGUST 2012
0700 SAFETY MTG. WIND REMINDERS. WHEN FIRST PARKED, WIND DIRECTION MAY BE CORRECT FOR VEHICLE BUT CHANGE WHILE WORK IS BEING DONE: DEVELOP WIND AWARENESS. PPE FOR WORK AROUND WATER INCLUDES LIFE JACKET, ALSO
8/29/12 Brad G/...

29 AUGUST 2012 CONT
GOOD PADDLE FOR FALLS. DISCUSS PID 'BREATHING ZONE' AND RELATIONSHIP TO WIND. SLIPS-TRIPS-FALLS IMPORTANT TOPIC BECAUSE POSSIBILITY IS ALWAYS THERE AND SOMETIMES ELEVATED POSSIBILITY IN CERTAIN LOCATIONS.
Brian L. Giles 8/29/12

30 AUGUST 2012
ANDY PROVIDING CURRENT WEATHER REPORT. PURGE WATER PROCEDURE AND DISPOSAL; DRUM SAFETY IN VEHICLE. WIND AND RAIN. VERIFY NMCB MANHOLE COVERS STILL INTACT (THEY ARE.)

31 AUGUST 2012
PPE FOR SHORELINE INSP INCLUDES LIFEJACKETS. KNOWN ROMMEL STAKE PIT VERIFIED TO HAVE LATH STRIP MARKERS. COMMUNICATION WITH RADIO/CELL PHONE; ONE OF THE TWO MAY WORK. CELL PHONES DOWN DUE TO MOISTURE. SLIPS-TRIPS-FALLS.
Brian L Giles 8/31/12

31 AUGUST 2012
REVIEWED WINDS / ROMMEL PITS / WATER HAZARDS; PARKING TO AVOID GETTING STUCK OR OPENING DOORS INTO WIND.
Brian L Giles 8/31/12

1 SEPTEMBER 2012
REVIEW ADAK-SPECIFIC HAZARDS.

3 SEPTEMBER 2012
WIND GUSTS FORCAST TO 65 MPH. BE AWARE OF RELATIONSHIP TO METAL DEBRIS / STRUCTURES, LIKE BUILDINGS AT NMCB AND SATELLITE DISH AT GCI COMPOUND. DRYERS IN UNITS; MOST TIMERS DO NOT WORK — DO NOT LEAVE RUNNING DRYER UNATTENDED. EARTHQUAKE AND TSUNAMI WARNINGS AND PROCEDURES. 7.6 MAG. QUAKE OFF COSTA RICA, WARNING GENERATED AND CANCELLED BEFORE RECIEVED ON ADAK.
Brian L Giles 9/3/2012

4 SEPTEMBER 2012
WINDS FORECAST 45-55 W/GUSTS
Brian L Giles 9/4/12

TO 55 ADAK LTM 2012

4 SEPTEMBER 2012 CONT.

0700 FORECAST TO 65 TEAMS TO QUIT WORK IF WINDS 50 MPH OR FLYING DEBRIS IS ENCOUNTERED METAL DEBRIS FROM HOUSING IS FOUND RUBRY WHERE/ANYWHERE. REMIND EVERYONE THAT THE CLOTHES DRYERS HAVE UN-TIMED CYCLES AND WILL NOT SHUT OFF. DISCUSSED HYPOTHERMIA AND HOW IT CAN SNEAK UP ON YOU. TEAM 2 REPORTS SEEING TWO SEPARATE PIECES OF METAL DETACH FROM OPERATIONAL SATELLITE AT THE GCI COMPOUND. TEAM WAS UPWIND OF THE SATELLITE.

5 SEPTEMBER 2012

0700 SAFETY TOPICS INCLUDED TSUNAMI WARNINGS AGAIN AS A 7.6M QUAKE WAS REPORTED OFF THE COSTA RICAN COAST. WINDS DIMINISHING TODAY TO 25 MPH, BUT CHANGE IS NATURAL ON ADAK.

Brian L Gile 9/5/12

TO 65 ADAK LTM 2012

5 SEPTEMBER 2012 CONT.

TEAMS WORKING IN OUTLYING AREAS SHOULD WEAR ORANGE VESTS AS HUNTING IS ACTIVE.

6 SEPTEMBER 2012

0700 SLIPS-TRIPS-FALLS ALWAYS RELEVANT TOPIC BUT MORE SO ON ADAK: MORE STUFF TO TRIP ON, OFTEN HIDDEN BY VEGETATION. RECENT 'CLEAN UP' MAY HAVE MADE THINGS WORSE AS METAL POSTS WERE CUT TO GROUND LEVEL, LEAVING SHARP EDGES, FOR OFF-HOURS EXPLORING, DON'T DRIVE FURTHER THAN YOU WOULD LIKE TO WALK BACK IN THE DARK IN THE CLOTHING YOU HAVE. ALSO, RADIOS MAY WORK WHEN CELL DOESN'T. WX MILD WITH 20 MPH WIND FORECAST.

7 SEPTEMBER 2012

WX WARM, 20-25 MPH WIND FORECAST; CHANCE OF RAIN.

Brian L Gile 9/7/12

TO 55 ADAL LTM 2012

7 SEPTEMBER 2012 CONT.

REMINDER THAN UXO COULD BE ANYWHERE. ANDY HAS PHOTO OF POSSIBLE UXO IN ROLLC(?) AREA. REMINDER THAT IF PIDS DO NOT HOLD ZERO OR IF BUMP TEST DOESN'T APPROXIMATE 100 PPM, BRIAN WILL RECALIBRATE. RECALIBRATE. TEAMS REPORT NO PROBLEMS WITH VEHICLES.

8 SEPTEMBER 2012

0700 WINDS TODAY FORECAST 25-30 MPH WITH HIGHER GUSTS. PARK ACCORDINGLY. IF WORKING INDOORS AND MOVING MATERIAL, BE AWARE THAT RAT FECES/URINE ARE LIKELY PRESENT. WEAR A DUST MASK IF SITUATION WARRENTS IT. DISCUSS HANTAVIRUS.

10 SEPTEMBER 2012

0700 WINDS FORECAST 25-30 MPH

Brian Giles 9/10/12

TO 55 ADAL LTM 2012 CONT.

10 SEPTEMBER 2012 CONT.

CONGRATULATIONS ON DOOR/WIND AWARENESS, STAY VIGILANT. VEHICLE SAFETY: RIGHT WAY AND WRONG WAY TO CHARGE OR JUMP START A BATTERY. ALSO TOWING A VEHICLE HAS A PROTOCOL - TOWED DRIVER CONTROLS BRAKES.

11 SEPTEMBER 2012

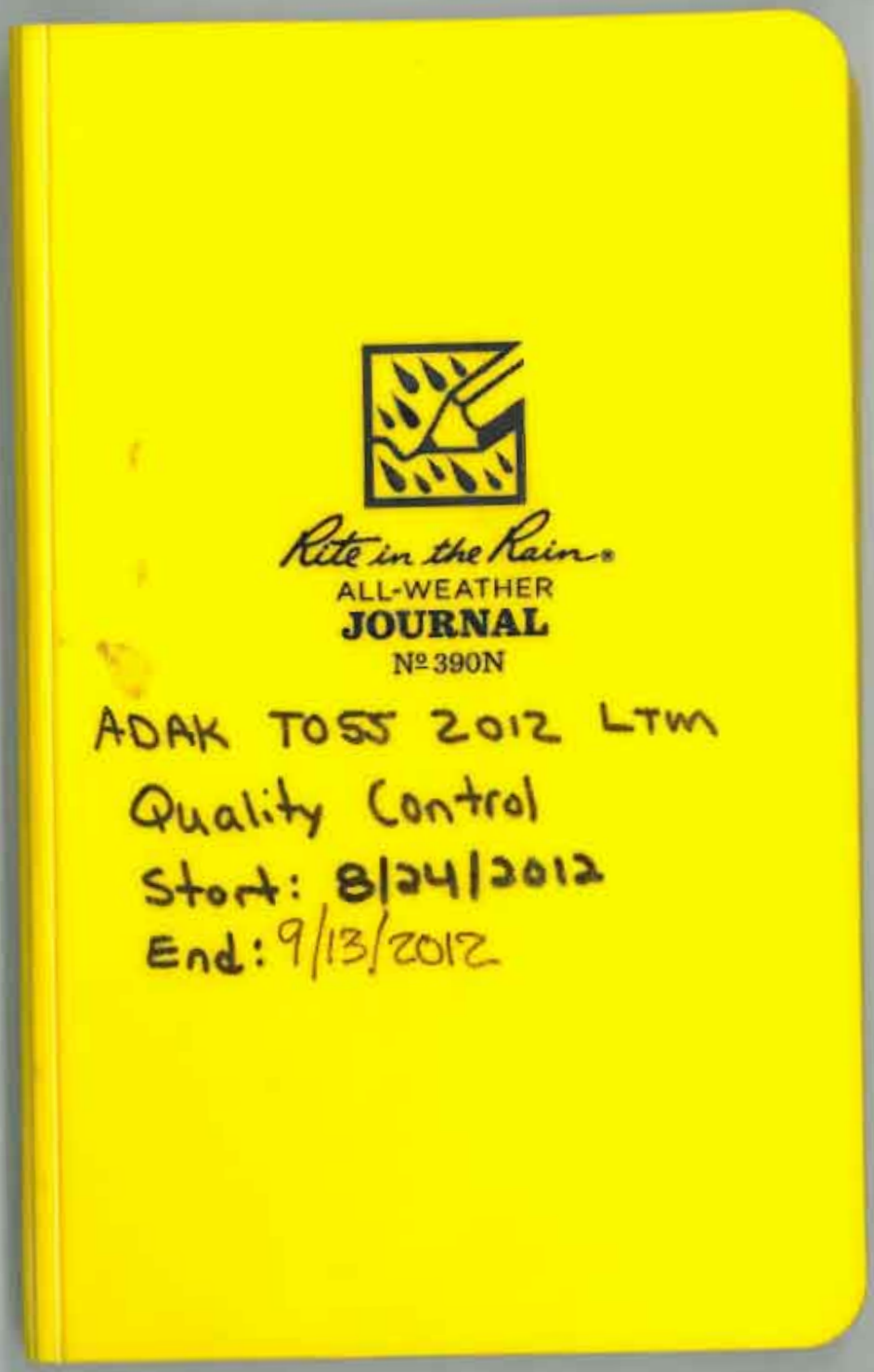
0700 WX FORECAST 25-30 MPH WIND, CHANCE OF RAIN. DISCUSSED SAFE METHOD FOR NEUTRALIZATION OF ACID IN SURPLUS SAMPLE BOTTLES FOR SHIPMENT.

12 SEPTEMBER 2012

0700 DISCUSSED PPE FOR TASKS INCLUDING HANDLING ACIDS. DISCUSSED HANTA VIRUS AND PPE. DUST MASKS AVAILABLE.

1030 NEUTRALIZED ACID IN SURPLUS BOTTLES TO 6.54 pH AND PACKED FOR SHIPMENT.

Brian Giles 9/12/12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ADAK TOSS 2012 LTM
Quality Control
Start: 8/24/2012
End: 9/13/2012

Book #: QC
Task Order #: 55
Contract: N44255-09-D-4005
Project: Adak LTM 2012
Navy Installation: Former Naval Complex, Adak, AK

Site Name: OU A
Start Date: 8/24/12
End Date: 9/13/12
Book Assignment: Team QC (Sherri Wunderlich)

Company: Sealaska Environmental Service
Address: 18743 Front St ~~Ste~~ Fl 2 slw 8/24/12
Poulsbo, WA 98370

Phone: 360-930-3300

Reviewed By: TOM

Date Reviewed: 12-19-12

Phone #s

Andy/Bob	cell	907-572-9208
Brian	cell	206-909-0017
Don	cell	360-204-4478
Aaron 108D	cell	360-930-1821 (8/31/12 to 9/6/12)
	Unit	592-2204
Sherri/Beth	Unit	907-592-2348
Brian/Don	"	907-592-2157
Beth	Cell	360-930-4663
Scott 150G	Cell	360-626-3991
"	Unit	592-0162

GoldStreak reservations
1-800-225-2752
Acct # 2744246766
ID 22456

Weather 907-592-8207

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entries by Sherri Wunderlich

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Sherri Wunderlich

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Project TO 55 Adak LTM 2012

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Task Order #: 55
Contract: N44255-09-D-4005
Project: Adak LTM 2012
Navy Installation: Former Naval Complex, Adak, AK
Site Name: OU A
Start Date: 8/24/12
End Date:
Book Assignment: Team QC (Sherri Wunderlich)
Company: Sealaska Environmental Services
Address: 18743 Front St NE Fl 2
Poulsbo, WA 98370
Phone: 360-930-3300

Reviewed By:

Date Reviewed

No further entries on this page

Sherri L Wunderlich 8/24/12

TO 55 Adak LTM 8/24/12

0900 Meeting held at Unit 111B. Attendees include Andy Lewis (FOL) Sherri Wunderlich (QCPM), Brian Giles (SHO), Don Belmer (geologist), John Highstone (field staff) & Bob Boyd (field staff). General overview of project & field logistics by Andy, health & safety overview by Brian, discussion of waste management activities by Andy. Watch UXO video

1130 Get fuel for all vehicles, drive to Bering Hill, and medical clinic

1345 Island tour, visit sites

1630 Set up QC office

2230 Finish for day

Sherri L Wunderlich 8/24/12

TO 55 Adak LTM 8/25/12

0900 Meeting held at 111B Attendees include Sherri, Don, Brian, John & Andy (Bob has day off). Andy discussed field tasks & procedures, Brian gives safety & health briefing, Sherri discusses QC for field work. Mock road map of sample activities is handed out & discussed.

1100 Organize & inventory sample containers & supplies from lab. A couple supplies/bottles are not present including 7 coolers (43 of 50 requested coolers received), 4 x 500mL amber glass w/ teflon liner (for TCLP VOCs) VIP (lab inadvertently sent preserved bottles), 4 trip blank vials (46 of 50 received). One methanol trip blank leaked & is unusable (sufficient trip blank jars are available) (Lead contained) A few jars had methanol less than the marked meniscus. Sherri will order supplies that are missing & needed.

The jars presumably designated

Sherri Lundy 8/25/12

TO 55 Adak LTM 8/25/12

1100 (CONT) for BTEX/benzene in sediment were pre-labeled by the lab with analysis indicated as AK101. Sherri lined out the analysis, we will designate appropriately as Benzene by 8260C or BTEX by 8260C.

~~The 8/25/12 similarly, the trip blanks for BTEX/benzene were pre-labeled & Trip Blank + 1841GT 8/10/11 EM preservation: MeOH~~

The BTEX/benzene jars & methanol do not contain red dots, which differentiates them from the GRO jars & methanol. Additionally, the BTEX/benzene methanol has the meniscus marked in black, rather than red (as GRO does).

1400 Group is lunch tour

1630 Develop summary sheet for field crew (based on last year's summary). Skim through CMP, noting discrepancy between SAP, WS 17 & Stand-Alone Specific Instruction (SASI)

Sherri Lundy 8/25/12

TO 55 Adak LTM 8/25/12

1630 CONT #9 regarding sampling a well with 0.02' product. Prior LTM events were performed as indicated in WS #17, with a sample collected if PT is <0.02' A list will be started to itemize discrepancies or suspected errors in CMP SAS1 #9 also incorrectly indicates product will be removed with a bailer if 0.02 feet or less product is measured (~~Product should be~~ Slow Recharge In actuality, per prior LTM events, a sample is collected if <0.02' product measured. No ~~pre~~ submersible sample collected if ≥0.02' product. Product removed by ~~peristaltic~~ pump if criteria presented in WS #17 met - ≥0.5' in a 3-inch diameter well or ≥0.1' in a 4-in diameter well or larger

2100 Off for day

Sharon Lu-Ith 8/25/12

TO 55 Adak LTM 8/26/12

1400 Review roadmaps for tomorrow's activities. Gather paperwork for Andy

1500 Off for day

Sharon Lu-Ith 8/26/12

TO SS Adak LTM 8/27/12

0700 Meeting held at 111B. Attendees include Sheri, Andy, Brian, John, Bob, Don. Andy passes out roadmaps & discusses today's activities. Brian gives safety briefing. Sheri discusses QC topics pertinent to today's tasks 1) remind crew to read SASI while performing tasks & inform me if they suspect a discrepancy between instruction & how they intend to do the task 2) remind crew to meet stringent stabilization criteria for well sampling, use calculator as necessary, get teammate to verify criteria is met 3) remember to add "-2012" suffix to sample IDs 4) discuss QC samples (Team 2 will initiate a ~~after~~ trip blk for BTEX & Field Dup & MS/MSD for select parameters at South of Runway wells) (Team 1 has no QC samples for SA79 wells) (Team 3 is doing DTW/DTP/well inspections

Sheri Lundahl 8/27/12

TO SS Adak LTM 8/27/12

0700 CONT at South of Runway. Mtg adjourns.

0800 Assist Team 2 generate trip blk
Observe Team 2 perform PID bump test & calibration.
SASI # 6 bullet 3 discusses a 2-point span calibration that is not performed. An "auto calibrate" is performed using a 1-point std. A 2-point calibration is not an option, as a second std is not on site. (CMP was released after supplies ordered & mobilized to site) Sheri will ~~alert~~ size #12 add to list of discrepancies/errors and discuss with Annette later. Due to office activities to follow up on, Sheri will not mobilize with crew. No vehicle available for QC, as one van is in the shop for repairs

0830 Office work, generate CPAC reports for 8/24/12 & 8/25/12.

1000 Check w/ Annette to see if she

Sheri Lundahl 8/27/12

TO SS Adak LTM 8/27/12

1000 cont wants to review CPQC reports before I send them. She replies to send to Aaron Vernik & Brian Cullen and cc her.

1215 Team 2 calls & says their conductivity probe is malfunctioning (stuck at 999). QC doesn't have a vehicle, advises team to break for lunch and pick up backup Horiba unit.

1400 Receive a call from Team 2. They are having same issue w/ backup Horiba. (Their first unit gave a "normal" reading when brought back for a calibration check. Switched to backup unit at that time, though.) QC instructs them to have Team 1 bring their Horiba over to measure conductivity. This issue is same as last year, when 2 Horiba units were sent back & replacements sent.

14 BLLS SW 8/27/12

Team 1 has same issue. Team 3 Horiba gets picked up to try

Sherri Lundh 8/27/12

8/27/12

1600 SW 8/27/12 Order placed for additional bottles that will be needed

1505 ~~1005~~ SW 8/27/12 John H stops by & asks if product needs to be removed in a well scheduled for inspection but not sample collection. Inform John not to remove product but will verify w/ Annette

1513 Brian G calls to report that Team 3 Horiba appears to be reading conductivity correctly

1530 Andy reports that Team 1 & Team 3 Horibas are reading correctly & consistent w/ one another (Initial reading from Team 1 was inaccurate but perhaps hadn't equilibrated.) Update Annette via phone.

1635 Annette returns email that specifies the same criteria for product removal applies, whether or not a well is scheduled for sample collection or not. Sherri relays info to John, will discuss tomorrow morning

Sherri Lundh 8/27/12

TU 55 Adak LTM 8/27/12

1700 Collect field forms & logbooks (Teams 1 & 3) when teams return from field. Review tomorrow's roadmaps before handing off to tomorrow Discuss Horiba with Andy, who called TRS for trouble shooting Backup Horiba & Horiba for Team #2 will be shipped back to TRS when replacements arrive

2030 Review Team 1 & 3 logbooks. Download photos from all teams. Team 3 photos include date but not time. Will discuss w/ Annette & notify Team 3 to reset cameras with format consistent w/ other teams (eg. 08/27/2012 2030) Will give feedback to Team 3 to fix mistakes on forms & logbook with single line-out, initial & date. Will instruct Team 3 to add commentary re missing time stamp & times on file off by 1 hour from actual time taken. Will ask teams to add unit of

Theresa Lu-deFeo

TU 55 Adak CTN 8/27/12

2030 measure to well inspection forms
CNT (PID reading in PPM, depth in feet)

2355 Off for day

Theresa Lu-deFeo 8/27/12

TO 55 Adak LTM 8/28/12

0700 meeting held at 1118. Attendees include Sherri, Bob, Andy, Don, Brian, John. Andy passes out roadmaps & discusses today's activities. Brian gives safety briefing. Sherri discusses the following QC topics.

1) same criteria applies for product removal, whether sampling or not
2" well - remove product if 7.5'
24" well - " " " 7.1'

2) time stamp is missing from Team 3 photos → John indicates time stamp is present when viewing on his computer; John used his own cameras - he will switch to Team 3 cameras. Additionally, his camera was off by one hour (eg. camera file name would indicate 9:00 when it was actually 10:00). Camera switch will resolve this as well, John should communicate to Jessie re: hour discrepancy. (new 8/28/12)

3) logbook for Team 1 indicates Mod Level D, logbook for Team 3 indicates Level D. Neither are

Sherri Lubchik 8/28/12

TO 55 Adak LTM 8/28/12

0700 CONT incorrect but Sherri, Andy & Brian agree that Level D is ~~appropriate for bottle fit~~ (new 8/28/12) ~~terminology~~ (new 8/28/12)

4) Request that teams hand back last year's forms when turning in field forms.

5) Correct mistakes with a single line out, initial & date.

6) On well inspection form, add unit of measure (e.g. 'btc) when recording values.

7) Logbook start date should be date of first documentation of site activity

1000 Receive email from Jennifer with clarifications that we need to sample NMCB well 02-478 for GRO, benzene, DRO this year and not sample at 02-479.

Andy indicates there is no water present at the location in SWMU 60 (852) where surface water has been previously collected. Consult w/ Annette regarding where/if to collect surface water & sediment samples.

Sherri Lubchik 8/28/12

TU 55 Adak LTM 8/28/12

1015 Annette will call Andy to discuss directly.

1400 Review tomorrow's paperwork / workplans, make clarification re. NMCB 02-479 & 02-478. Since limited sediment may be available at NMCB NL-05 location, adjust jar size / quantity for DRO & GRO, as appropriate and accounting for enough material for MS/MSD. We will try to collect the following

GRO (2) 4 oz wide mouth glass jars, 25g sediment + 25 mL surrogated methanol (sufficient for sample, MS, MSD & backup for all)

BTEX (2) 4 oz wide mouth glass jars, 25g sediment + 25 mL (non surrogated) methanol (sufficient for sample & backup)

DRO (3) 4 oz glass amber (sufficient for MS/MSD, sample & backup). (2 will be sufficient, w/ one for analysis & one for backup)

1630 John stops by. He said his photos do NOT display time stamp when

Shawn C. Wardell 8/28/12

TO 55 Adak LTM 8/28/12

1630 viewed on his computer, they only include the date stamp.

1730 Annette replies that she thinks we can photoshop the time.

2100 Gather supplies & bottles for NMCB sediment NL-05 sampling in preparation for tomorrow.

2145 Downloaded photos from today's activities. As requested, John switched cameras & all of today's photos have a date & time stamp. Also, John went to South of Runway 18/36 area & relabeled & retook photo of RW-18/36-02. Skimmed field forms & COC forms. At NMCB wells NMCB-07 & NMCB-10 ~~and NMCB-11~~ SLW 8/28/12 & we will not be able to sample per CMP SAP specification when ≥ 0.02' product is measured. We will need to remove product at NMCB-07 (4" well w/ 0.37' product).

2345 Email Annette summary of today's activities

2350 off for day.

Shawn C. Wardell 8/28/12

TO 55 Adak LTM 8/29/12

0700 Meeting at 111B. Attendees include Sherri, Andy, Bob, Don, Brian & John. Roadmaps & field forms for today's activities are handed out & discussed. QC topics discussed, It's fine to use prior years DTB for calculating 3x casing volume, if well hasn't been inspected. Don prefers well inspections/DTW per site in same day when possible. Brian discusses safety, esp working near shoreline.

0730 Schedule TRS shipment of two Horibas (nonfunctioning for conductivity) via Gold Streak.

20" x 25" x 9" 15 lbs

21" x 18" x 8" 10 lbs

TRS phone # 1-800-532-3381

Depart Adak on Flight 161 8/30/12, arrive in Anchorage at 21.44, depart Anchorage on Flight 110 at 1.40, arrive in Seattle at 6AM, depart Seattle on Flight 662 at 815 on Aug 31, arrive in Ft Worth/Dallas

Sherri L Underhill 8/29/12

TO 55 Adak LTM 8/29/12

0730 CONT for pickup by TRS Environmental at 12.00 on Aug 31

AWB # 8250 0806

0815 Email tracking info to James Emmons at TRS

0830 Generate Sampling Deviation Forms for NMCB wells NMCB-07 & NMCB-10, which have product ≥ 0.02'.

0910 Send to Annette for review

0915 Prep to go with Team 3 (John) & sample sediment location NL-05 at NMCB. Activities will be recorded in Team 3 logbook. Continued working w/ Team 3 for duration of day.

1800 O/O for day

Sherri L Underhill 8/29/12

TO 55 Adak LTM 2012 8/30/12.

0700 Meeting at 111B. Attendees include Sherri, Bob, Andy, Don, Brian, John. Based on yesterday's activities, a Sampling Deviation Form is necessary to document NMCB 02-818 had product thickness at 0.05' & will, therefore, not be sampled. A well inspection performed 8/28/12 indicated PID reading 2.3 ppm at well head & 0.0 in breathing zone, sheen, no product, absorbent sock removed. Team 1 was scheduled to sample the well on 8/29/12 but measured product of 0.05' Reading was confirmed by Team 2's interface probe.
Roadmaps were handed out & today's activities discussed. Brian discusses safety. Sherri discusses QC items. Today is shipping day; we will have ~ 13 coolers. Sherri will make Goldstreak reservation.

0830 Call to make Goldstreak reservation for shipping coolers to TAD: AW # 8259 4993, 13 pcs 800 pounds. Will arrive in Portland 8/31/12 5:30.

Sherri Lynch 8/30/12

TO 55 Adak LTM 2012 8/30/12

0840 Review COC forms vs Revised CMP Tables 4-2, 4-3 & 5-5. Resolve/add clarifying remarks as necessary. Discuss w/ sampling crew as appropriate. Paperwork - get roadmaps for Tanker Shed, SA 79 & SWMU 61 ready for handing out

1200 Assist w/ sample handling & packaging, getting samples ready to ship. Inspect coolers

1435 Send email to lab to alert them that 12 coolers will arrive tomorrow, available for pickup at Portland PDX.

1500 Generate Sampling Deviation form for NMCB 02-818, can't sample due to PT 2.0 ft. Send via email to Annette for review.

1600 Andy is reviewing roadmaps before handing out to teams; Bob departs. Discrepancy is noted, roadmap & Revised CMP Table 4-2 indicate collection of sample is needed at SWMU 58 well 611. However,

Sherri Lynch 8/30/12

TO 55 Adak LTM 2012 8/30/12

1600 CONT 2011 GWMP, Revised CMP tables 4-1 & 4-3 indicate sampling (of DRO) is discontinued. QCPM concurs no sample is to be collected at this location

1630 Don points out that the ~~SWMU~~ SA 78 map included w/ roadmap is different than the one in the CMP (Fig 17-7) in regard to shoreline inspection route. Unless Annette indicates otherwise, we will follow the roadmap's map, which shows a longer route.

1700 Off for day

Sherri Lynch 8/30/12

TO 55 Adak LTM 2012 8/31/12

0700 meeting at 111B. Attendees include Aaron Vernik (RPM, NAVFAC NW) Sherri, Brian, Andy, Don, Bob, John. Andy discusses today's activities, Sherri goes over QC samples Brian gives safety briefing.

0800 Assist teams with trip blanks. Unpack, inventory & organize 13 coolers rec'd from lab (-only ordered 5 when not all ordered supplies showed up, others must have been held up)

Received email responses from Annette indicating not to sample SWMU 58 well 611, follow our map for SA 78 shoreline inspection, approval of Sampling Deviation Form for NMCB 02-818.

1030 Send (email) Sampling Deviation Forms for NMCB wells NMCB-07, NMCB-10 & 02-818 to Aaron Vernik & Brian Cullen w/ cc to Annette & Scott Elkind.

Sherri Lynch 8/31/12

TO 55 Adak LTM 2012 8/31/12

1100 Team reports no contamination along SWMU shoreline, thus, no NL-10 surface water or sediment sample will be collected

1330 Review field forms

1830 off for day

Sherri Lundh 8/31/12

TO55 Adak LTM 2012 9/1/12

0700 Meeting at 1118 Attendees include Aaron Vernik (RPM), Sherri, Andy, Bob, Don, Brian, John. Discuss field activities for day, all will mob to SWMU 61 to collect GW, SW, sed samples & perform shoreline inspection Sherri will work w/ John as Team 3.

0800 Prepare for field event

1000 All at SWMU 61 wells 14-210 & TFB-MW-4B are accessible for sampling. Lower well 14-113 (near shoreline) & shoreline are flooded. Thus, planned activities along shoreline will not be performed today

1100 Back at unit Review yesterday's field forms Will need to generate Sampling Deviation Forms for NL-10 (no contamination observed) and SWMU 58 12-121, which was not sampled due to product at 0.03'.

1630 ~~Generate~~ Sampling Deviation Forms identified above sent to Annette for signature yet because internet is down

Sherri Lundh 9/1/12

TOSS Adak LTM 2012 9/1/12

1730 Review field forms from teams for todays activities

1900 off for day

TOSS Adak LTM 2012 9/2/12

0945 Call Gold Streak & make a reservation for todays shipment of 5 coolers to the lab. Flight 161 from Adak to Anchorage, Flight 132 from Anchorage to Portland arriving at 5:29 AM on 9/3/12. AWB # 8269 1733

1300 Inspect coolers prior to shipment (Samples for 4 coolers, rather than 5.)

1330 Go with Team 2 to airport to drop off coolers. Ensure coolers will be kept refrigerated at Portland PDX.

2100 Gather roadmaps, prior years forms & forms for 2012 event for sites not yet started

2200 Drop off at Andy's unit

2210 Generate CPUE Reports & Sighting Deviation Forms for SWMU 58 12-121, SA78 NL 9/12 & Former Power Plant 01-151.

2350 Send Surveys Deviation Forms to Annette for review

2355 send tracking # for coolers to Gold Streak

2358 off for day

9/2/12

TO 55 Adak LTM 2012 9/3/12

0700 Meeting at 111B. Attendees include Aaron, Scott Elkind, Beth Leicher, Brian, Don, Andy, Bob, John, Sherri. Team 1 today will be Sherri & Bob at SA80, Team 2 will be Don & Brian at GC1. Andy & John will do O&M. Aaron, Scott & Beth will do IC inspections. Sherri to check NOAA NWS website for weather alerts after each week. (Field activities today for Sherri are documented in Team 1 logbook.)

1400 Review field forms, do office work

1600 Off for day

Sherri Lynch 9/3/12

TO 55 Adak LTM 2012 9/4/12

0700 meeting at 111B Attendees include Andy, Bob, Brian, Don, John, Beth, Scott, Sherri, Aaron. Plan for today includes Team 1 finishing SA80 & moving to SWMU 17, Team 2 finishing GC1. (Team 3 will do O&M)
Assist teams getting ready for sampling.

0800 Make arrangements to ship back an interface probe via Gold Rush

Recipient:
Crotech
ATTN: RMA # 101150
2050 E 40th Ave
Denver, CO 80205
Phone 1-800-833-7958
14"x12"x8", 8 lbs
AWB # 8269 4640

Fl 161 depart Adak 9/6 1800 → arrive Anc 2148
498 depart Anc 9/7 0030 → arrive Seattle 0448
676 depart Seattle 9/7 0735 → arrive Denver 1110

FedEx tickets to final destination

0845 Talk to Annette. Discuss wording for Sampling Deviation Form for Former Power Plant 01-151. Sherri will

Sherri Lynch 9/4/12

TO55 Adak LTM 2012 9/4/12

0845 cont Scan & send Annette the shoreline inspection forms completed thus far. Annette confirms we need site overview pictures.

0930 Receive email from Greg Sclafa at lab. Shipment 2 samples were received within acceptable temperatures & no bottles were broken. Lab extracted 3 samples for PAH outside holding times, 02-231-2012, 02-232-2012 & AS-1-2012.

1120 Scan & send shoreline inspections, sediment & surface water forms to Annette to review.

1230 Receive Annettes comments re. forms. Pass along to Teams 1 & 2 at lunchtime (Team 3 did not perform any shoreline inspections & there were no comments re. sediment collection form.

1330 Complete & print out Sampling Direction forms for SWMU 56 12-121, SA 78 NL-10 & Former Power Plant 01-151. Will give to Aaron to review & sign.

Shawn Lynch 9/4/12

TO 55 Adak LTM 2012 9/4/12

1400 Catch up on CPAC reports, lab logging & receipts, & field forms & photo reviews

1600 Receive field forms for today's activities. Review.

1900 Off for day

Shawn Lynch 9/4/12

TO 55 Adak LTM 2012 9/5/12

0700 Meeting at 111B Attendees include Brian, Don, Scott, Bob, John, Bob, Beth, Aaron, Sherri. Discussed game plan for today, QC items (including shoreline inspections, missed holding times, sampling deviation forms, trip blanks), safety briefing.

0800 Prepare trip blanks for Teams 1 & 2.

0815 Aaron signs Sampling Deviation Forms (8+4 3). Regarding missed holding times for PAHs, Aaron indicates he'd like to recollect (to avoid addressing questions for comment>) if there is time near end of field event, No need to recollect if there is not sufficient time. Discussed CMP; Scalcoka redlines (from Nov 2011) did not get incorporated into Stand Alone Specific Instructions & Scalcoka recommendation to switch labs (from T. America - W Sacramento) to Alta/Vista) was not incorporated into Marine SAP

Sherri L Wyll 9/5/12

TO 55 Adak LTM 2012 9/5/12

1000 Phone call w/ Annette. Discuss shoreline inspection forms at length. Relay to Annette that Aaron prefers re-sampling for PAHs at 3 South of Runway locations to meet hold... times. Annette asks to discuss w/ Don (whether PAHs only) as wells are tidally influenced. Annette says Aaron asked her if we can add collection at blue seep at Roberts Landfill (NL-14) to scope, Annette says "yes". Sherri will check to see if we have sample containers & will touch base with Aaron after he visits the location today during IC inspection.

1100 Review log-ins for Shipment #1 samples vs. official scope tables 4-3 & 5-5. The receipt info indicates pH values for DRO for some water samples were not checked during log-in.

1315 Lab indicates they don't check the pH for organics (e.g. DRO) due to

Sherri L Wyll 9/5/12

TO 55 Adak GM 2012 9/5/12

1315 CONT the potential for contamination, they only check inorganic bottles. The pH for DNO is checked prior to extraction.

1500 When asked about BTEX results being tidally influenced at wells that Aaron prefers to resample for PAHs due to missed holding time, Don indicates he does + thinks BTEX results would be. Thus, no need to recollect BTEX along with PAHs (BTEX & PAHs are summed to calculate total aqueous hydrocarbon [TAqH]).

2330 Send email to Annette w/ update re items discussed earlier & today activities.

Shawn Cudath 9/5/12

TO 55 Adak GM 2012 9/6/12

0700 meeting at 111B Attendees include Sherri, Bob, Andy, Don, Brian, John, Beth, Scott & Aaron. Discuss activities to perform today - finish sample GI (well, surface water, sediment sampling, shoreline inspection, IC inspections) Assist teams prepping.

0800 Leave Unit w/ IC team. Stop at Fuels to get escort (Bob) to Roberts Landfill to see blue seep (NL-14)

LATE ENTRY

0730 Discuss collecting a surface water sample at Roberts Landfill NL-14 (blue seep). CMP SAP indicates a sample will be collected in 2013. Aaron decides to wait for the scheduled event next year (2013).

0745 Discuss shoreline inspection forms w/ Aaron He indicates intent is to document potential sources of petroleum contamination due to Navy activities

Shawn Cudath 9/6/12

TO 55 ADAK LTM 2012 9/6/12

0830 Arrive at Roberts Landfill NL-14. Beth documents in IC logbook & takes photos.

0900 Arrive at SWMU 61 to join Teams 1 & 2 sampling well 14-113-2012 & surface water & sediment locations NL-D-04 and NL-04. ~~Bring bottles~~ SW 9/6/12

1100 Back to Unit# 111B Observe teams packing coolers for offsite shipment to KB.

1230 Call GoldTrack to reserve shipment of 4 coolers. AWB# 8167 0175.

1245 Inspect coolers, COCs vs Sample labels

1330 Download photos, discuss field forms for shoreline inspection & sediment collection with Bob & Scott. Will follow up re documentation of a couple items w/ Annette.

1700 Email lab w/ tracking info for tomorrow's coolers

1900 Off for day

Sherri Cahill 9/6/12

TO 55 Adak LTM 2012 9/7/12

0700 meeting at 111B Attendees include Beth, Sherri, Don, Brian, Scott, Andy, Bob, John. Discussed todays activities (RUICC for Team 1, Tanker Shed for Team 2). If time remaining, resample the 3 South of Runway wells that need resampled for PAHs.

0800 Prepare trip blanks for today's sampling. Assist teams prepping.

0900 Review field forms, misc office work

1500 Review laboratory log-ins from shipment #2

1630 Review field forms as teams return from todays activities

1900 Off for day

Sherri Cahill 9/7/12

TO 55 Adak LTM 2012 9/8/12.

0700 Meeting at 111B. Attendees include Beth, Sherrel, Don, Brian, John, Scott, Bob, Andy. Discuss todays activities (Team 1 at SWMU 62 Sandy Cove, Team 2 will finish South of 8 Runway relakes for PAH missed holding times & then move onto SWMU 62 Sandy Cove

0800 Prepare trip blank for today's sampling

0830 Review field forms, photos. Assist teams as needed. Prepare CPOC reports. Generate CPOC reports

1900 Off for day

Sherrel Welch 9/8/12

TO 55 Adak LTM 2012 9/9/12

1200 Review COC forms for Teams 1 & 2. Identify that we collected DRO but not benzene for SWMU 62 Sandy Cove MW-187-1. Will recollect for benzene (only). Make GoldStreak reservation for 6 coolers.

1245 AWB # 8167 6560
Flights 161, 132, ETA 5:29 A.M.

1400 Take coolers to airport

1700 Spoke to Beth, who confirmed DID was playing at airport today

2030 Finished generating QC Contractor Production Reports for 9/3/12 to 9/9/12.

1155 Sent Contractor Production QC Reports 9-15 (to cover field activities 9/3/12 to 9/9/12) to Aaron & Brian Cullen with cc to Annette & Scott

1159 Emailed Greg Salata to cancel original analysis of PAHs (extracted outside holding time) for South of Runway wells 02-231, 02-232 & AS-1. Wells were recollected for PAHs.

1159 Off for day Sherrel Welch 9/9/12

TO 55 ADAK LTM 2012 9/10/12

0700 Meeting at 1118. Attendees include Sherri, Beth, Don, Brian, Andy, Bob (2 subs) & John. Discuss todays activities at SWMU 62, QC items, health & safety briefing.

0800 Prepare trip blanks for today & tomorrows sampling events.

0930 Receive email from Corey Salsbe (ALS/CAS) that there were a few broken bottles for benzene analysis (broken) { ROICC 08-200-2012 1 of 3 VOC vials; ROICC 08-175-2012 2 of 3 VOC vials }. Replied, asking lab to analyze the samples for benzene prior to Friday 9/15. INformed them that 08-200-2012 may need diluted (based on 2009 & 2010 results, not sampled in 2011) and 08-175-2012 likely will not need diluted.

1000 Exchanged emails with lab re how to ship back unused spare DRO bottles (1L amber w/ HCl). They recommend discharging & flushing w/ water or, alternatively, filling with water and shipping. Pass along info to Brittle.

Shawn L Smith 9/10/12

TO 55 ADAK LTM 2012 9/10/12

1400 Annette calls to discuss shipping back extra DRO bottles. She says to make a baking soda solution (water + baking soda), pour into container, verify pH is >2, dump liquid down drain, ship back empty bottles. Wear goggles & gloves when adding baking soda sol'n to bottles. $NaHCO_3 + HCl \rightarrow NaCl + H_2O + CO_2 \uparrow$

1415 Prepare bottles for IDW CERCLA & petroleum purge water. Initiate COC form.

1520 Receive call from Don. Team 2 is at a well w/ orange plugs in water & can't stabilize after 1½ hrs of purging. Three times casing volume is ~ 25 gallons. Recommend to Team 2 to purge 2 hours & then sample, per CMP Worksheet 17.

1530 Check forms & photos

1900 off for day

Shawn L Smith 9/10/12

TO 55 Adak LTM 2012 9/11/12

0700 Meeting at 111B Attendees include Sherri, Beth, Andy, Bob, Don, Brian & John. Today's activities include SWMU 62 wells, shoreline inspection, sediment & surface water sampling

0800 Generate trip blank for GRO & BTEX to accompany sediment sample from SWMU 62 Eagle Bay location NL-09. Bob questions why BTEX trip blank is needed, as his roadmap indicates BTEX is not needed for NL-09S-2012. Sherri used official scope table 4-3, which shows BTEX is included. Check other CMP tables & TO 39 AGWMR, these indicate BTEX is necessary. Tell Bob to collect BTEX

0930 Email Annette w/ discrepancy Annette calls & confirms BTEX is necessary at two locations (NL-09). Discuss shoreline inspection forms & DRO bottles. Will generate an FCR for IDW purge water from CERCLA sites & AO waste disposal plan indicated is priority pollutant metals plus aluminum is necessary.

Sherri Lewis 9/11/12

TO 55 Adak LTM 2012 9/11/12

0945 Generate FCR for IDW purge water from CERCLA sites SWMUs 14 & 17 because total lead is the only total contaminant of concern for these sites It is not necessary to analyze the sample for 12 of the other priority pollutant metals and Aluminum. Send FCR to Annette & Andy for review, ~~Andy for~~ SLW 9/11/12

1130 Bob inquires about location of SWMU 62 Eagle Bay surface water/ sediment NL-09. Roadmap figure indicates location is south of AMW-704, but it's north (per Bob) Photos from TO 39 clearly its near a marked post.

1215 Review photos & forms, generate CPAC reports

1600 Start consolidating, organizing & packing bottles in garage

1700 Inspect NL-09S-2012 containers for GRO & BTEX GRO bottles contain too much sediment Not enough room to add

Sherri Lewis 9/11/12

TO 55 Adak LTM 2012 9/11/12

1700 another vial of surrogated methanol
CONT to bring to 1:1 ratio of sediment
to methanol BTEX aliquot OK.
Will recollect for GRO only

2000 off for day

Shawn L Wallace 9/11/12

TO 55 Adak LTM 2012 9/12/12

0800 Meeting at 111A. Attendees include Bob, Andy, Dan, Brian, Beth, John & Sherri. Discuss game plan for today. Includes resampling GRO aliquot for SWMU 62 Eagle Bay NL-09 sediment, neutralizing some DRO bottles (1 L amber w/ HCl) & discarding following Annette's instructions on 9/10/12 except won't dump down drain, sample petroleum & CERCLA purge water, review field forms, photos, COC forms, start packing up supplies to ship to CERCLA laboratory back Annette to send FCRs to Aaron & Brian

0940 Get bunker to neutralize DRO bottles. Activities documented in Team 3 logbook.

1100 Collect IDW-PETRO-2012

1115 Collect IDW-CERCLA-2012. Cap of TCLP VOC container fell on bunker floor & was placed on bottle. Wrote instructions on small bottle label for lab to use the other 500 mL HDP amber bottle for TCLP VOCs. Bottle w/ dropped lid is pickup in case of breakage, won't be used for analysis

Shawn L Wallace

TO 55 Adak LTM 2012 9/12/12

1145 Assist Team 3 package samples prior to shipment tomorrow

1230 Review field forms, misc. office tasks.

1430 Review lab log-ins for third fourth shipment of samples. All OK.

1600 Review COC forms for tomorrow's shipment. All OK.

2130 Off for day

Sherri Lewis 9/12/12

TO 55 Adak LTM 2012 9/13/12

0900 Paperwork

10.00 Beth calls Goldstreak reservations. Goldstreak booked for lab samples, normal flight not workable as pre-booked by another client. Beth calls back, we set up for samples to go from Adak → Anchorage → Seattle → Portland arriving Fri 9/14/12 at 7.50am. AWB# 814 6152.

10:15 Email lab.

10:30 Misc. office work, packing shipping bottles

17.00 Leave for airport

Sherri Lewis 9/13/12

NO FURTHER ENTRIES AT 12-12-12

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ADAK

TOSS 2012 LTM

TEAM 1

Start: 8/21/12

END: 9/16/12

Book #1 – Team 1

Project: Adak LTM 2012

Contract #N44255-09-D-4005

Task Order Project #TO55

Navy Installation = Former Naval Complex, Adak, AK

Site Name = OUA RB 8/23/12

Start Date = ~~8/23/12~~ 8/21/12

End Date = 9/16/12

Book Assignment = Team 1

Andy Lewis

Robert Boyd

Company = Sealaska Environmental Services

Address = 18743 Front St. NE, Fl. 2

Poulsbo, WA 98370

Phone = 360-930-3300

Reviewed By: [signature] TOM 12-19-12

Review Date: 12-19-12

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PAGE	REFERENCE	DATE
	PID - Ion Photocheck Ion/PC-Plus-1000EX #1088742 TRS Environmental #08-01540	
	Pump - Pegasus Peristaltic Pump Peg/Alexis Peri Pump #1133289 TRS Environmental Peg/Alexis Peri Pump #1132516	
	Multimeter - Horiba Water Quality Monitor Model #W-22xD Mfg#9116010 Auto-Cal Solution: 100-4 HG S/N V460DNV7	
	4 Gas Meter	
	Interface Meter - 3/8" interface meter (Sealaska owned)	

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JOURNAL
FIELD BOOK

Name Team 1
Andy Lewis, Robert Boyd

Address

Phone

Project TO55 Adak, LTM 2012

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Page Pattern		Cover Options	
Left Page	Right Page	Polydura Cover	Fabrikoid Cover
Lined	Lined	Item No. 390N	Item No. 390nF

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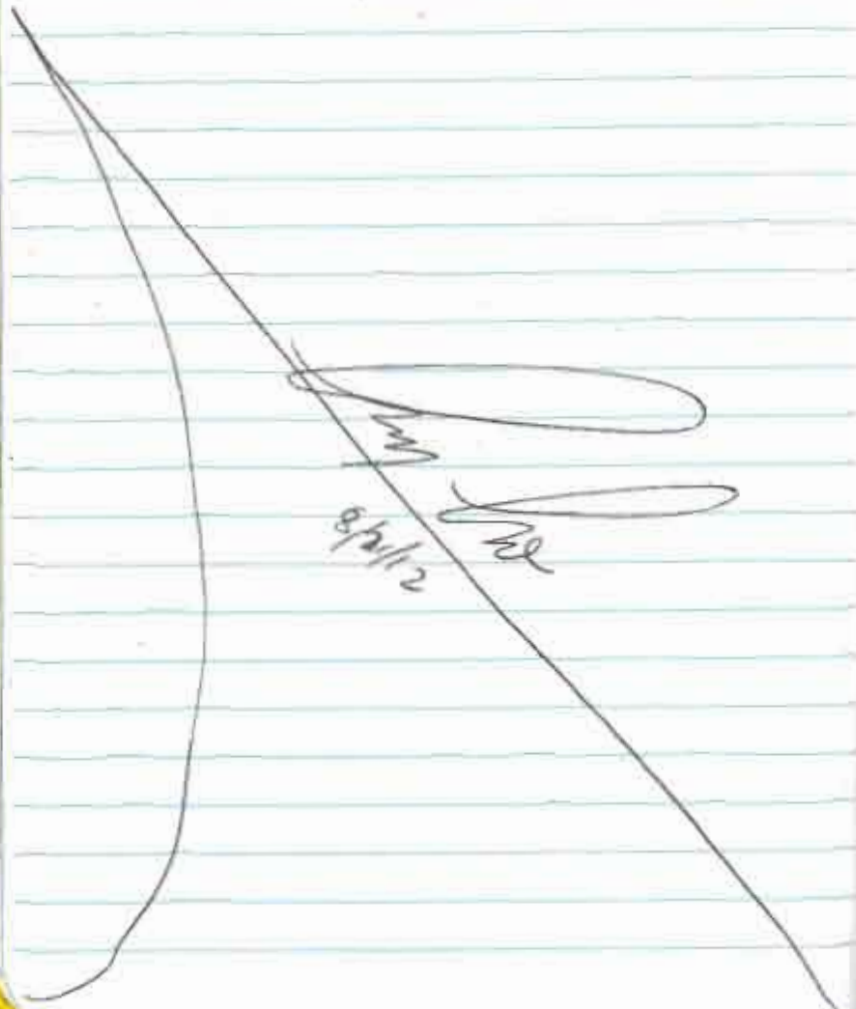
TO55 Adak LTM Site Prep 8/21/12

0800 A. Lewis Calibrated 4 Horibas, 2 Ink/Sea meters, 4 PID meters, Set 4 peristaltic pumps to charge. Called TRS environmental to discuss Horiba Parameter settings.

1130 A Lewis complete



TO55 Adak LTM 2012 8/24/12

0900 - Onsite office meeting. Conducted Tailgate Heating Safety Topics covered:

Communications, weather/wind hazards, inspections, monitoring, required PPE (Modified level D: safety glasses, nitrile gloves, steel toe boots, weather/rain gear).

Weather: 57° F. partly cloudy

1000 - Orientation and site overview.

1300 - Lunch

1330 - Site overview

1800 - End of day.

TO55 AdaK LTM 2012 8/25/12

0900 - Onsite office meeting
Conduct Tailgate Health & Safety
SSHO - B. Giles
Topics covered:
Slips, trips, & falls, wind awareness, proper PPE (Mod level D: nitrile gloves, safety toe boots, & safety glasses).
0930 - A. Lewis coordinating housing issues, tow Team 2 van to City of AdaK mechanic shop, prep van, prep bunker, & prep paperwork.
1900 - End of day.

Robert Boyd 8/25/12

TO55 AdaK LTM 2012 8/27/12

0700 - On site office meeting.
Conduct Tailgate Health & Safety
SSHO - B. Giles.
Topics covered:
Slips, trips, & falls, wind safety & awareness, proper PPE (Mod level D: nitrile gloves, steel toe boots, safety glasses)
0800 - Mob truck for sampling
PID bump test - 99.7 ppm
0815 - Calibrate Horiba

Time	pH	SC	Turb	DO	Temp	Sal	ORP
0818	4.00	4.50	0.0	10.01	15.84	0.2	248
1215	3.99	4.49	0.0	10.09	15.21	0.2	247
1715	3.99	4.49	0.0	10.21	14.70	0.2	247

0925 - A Lewis & R. Boyd arrive on site 02-230 (SA 79)
0945 - Collect [DTW = 12.48 ft btoc]
Set flow rate: 0.5 L/min
0947 - Collect water quality parameters listed on water sampling log.
1007 - Parameters stabilized: Purge 2.5 gal, pH - 6.20, SC - 0.648 mS/cm, Turb - 12 NTUs, Temp - 7.13°C, DO - 0 mg/L, Sal - 0.0%, ORP - -79 mV

Robert Boyd 8/27/12

TO55 AdaK LTM 2012 8/27/12

1010 - Collect Sample 02-230-2012
• 2-1 L amber w/HCl DRO (AK102)
1025 - Collect DTB = 18.93 ft btoc
Complete Monitoring Well Guaging Visual Inspection Checklist.
Late Entry
0935 - PID: 0.0 ppm
1035 - A. Lewis & R Boyd on site MRP-MW8 (SA-79).
1040 - Collect [DTW = 11.21 ft btoc]
Set flow rate: 0.5 L/min
1052 - Collect water quality parameters listed on water sampling log.
1108 - Parameters stabilize: Purge 2.0gal, pH-6.09, SC-0.439 mS/cm, Turb - 5 NTUs, DO - 0.0 mg/L, Temp - 7.18°C, Sal - 0.0%, ORP - -71 mV
1115 - Collect sample MRP-MW8-2012
• 2-1 L amber w/HCl DRO (AK102)
1130 - Collect DTB = 16.00
1140 - Complete Monitoring Well Guaging Visual Inspection Checklist.
Monument lid missing, light surface rust
PID: 0.0 ppm
1200 - Lunch

RalutBud 8/27/12

TO55 AdaK LTM 2012 8/27/12

1300 - A. Lewis & R. Boyd to City of AdaK mechanic shop to get info on Team 2 van repair
1320 - A. Lewis & B. Boyd on site 601 (SA 79).
Weather: 50°F, overcast, rain
1330 - Collect [DTW = 11.68 ft btoc]
Set flow rate: 0.5 L/min
1353 - Collect water quality parameters listed on water sampling log.
1405 - Parameters stabilize: Purge 1.5gal, pH-6.11, SC-0.350 mS/cm, Turb - 3 NTUs, DO - 0.0 mg/L, Temp - 7.65°C, Sal - 0.0%, ORP - -50 mV
1415 - Collect sample 601-2012
• 2-1 L amber w/HCl DRO (AK102)
1430 - Collect DTB = 18.02 ft btoc
1440 - Complete Monitoring Well Guaging Visual Inspection Checklist
PID: 0.0 ppm
1450 - Photo document wells 02-230, MRP-MW8 & 601
1500 - A. Lewis & R. Boyd on site 02-232.

RalutBud 8/27/12

TOSS AdaK LTM 2012 8/27/12

~~RB 8/27/12~~ ~~TS~~ 1505 - Team 2 is having issues with SC readings on Horiba #2. SC keeps reading 0.999 mS/cm and 0.90 mS/cm, swapped Horiba #2 with back-up Horiba, but same issue persists. Piggy-backed Horiba #1 & Horiba #3, & both read accurate.

1530 - Contact TRS for trouble-shooting. TRS's instructions are to: press Measure to "Cond", Cal twice, push Cal (Span), up arrow to 4.49 mS/cm, Press enter.

1615 - A. Lewis & R. Bayd piggy-back Horiba #2 & Back-up Horiba on Horiba #1 at 02-232 after trouble-shooting, but issue persists.

~~RB 8/27/12 Horiba #2 (TRS# 1109045)~~ & Back-up Horiba (TRS# 1109045) & Horiba #2 (TRS# 1116186) will be shipped back to TRS Thursday, when 2 replacements should arrive.

~~TS RB 8/27/12~~

Robert Bond 8/27/12

TOSS AdaK LTM 2012 8/27/12

1700 - A. Lewis & B. Bayd de-mob sample van, QC paperwork, & download photos. A. Lewis & Sherri Wunderlich (QC) prepping for next day field work

1900 - End of work day

Robert Bond 8/27/12

TO55 AdaK LTM 2012 8/28/12

0630 - A. Lewis, R. Boyd begin prepping paperwork.

0700 - On site office meeting. Conduct tailgate Health & Safety SSHO - B. Giles

Topics covered:

Proper PPE (Level D: Nitrile gloves, safety glasses, safety toe boots, PFD), wind safety & awareness, slips, trips & falls.

0730 - MOB sampling van

0815 - A. Lewis & B. Boyd on site NSWSD-7 (South of Runway 18-36).

Late Entry

0740 - Calibrate Horiba

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp	Sal	ORP
0740	4.00	4.79	0	10.13	15.03°C	0.2%	258mV
1400	4.00	4.50	0	10.12	16.07°C	0.2%	263mV

0825 - Collect water quality parameters: pH - 5.97, SC - 12.7 mS/cm, Turb - 7 NTUs, DO - 8.41 mg/L, Temp - 13.2°C, Sal - 0.5%, ORP - 126 mV

0830 - Collect sample NSWSD-7-2012

- 3-40mL amber VOC vials w/ HCl BTEX 8260C

Rob Boyd 8/28/12

TO55 AdaK LTM 2012 8/28/12

0830 cont...

- 2-1 L amber w/ HCl DRO AK102
- 2-1 L amber u/p PAHs 8270D SIM

0840 - Collect sample NSWSD-17-2012 (Dup)

- 3-40mL VOC vials w/ HCl BTEX ~~8020~~ 8260C
- 2-1 L amber w/ HCl DRO AK102
- 2-1 L amber u/p PAHs 8270D SIM

0850 - Complete Surface Water Sampling Visual Inspection Checklist.

- Weather: 53°F, light rain
- Man-made debris: 2 lines run across Sweeper Creek to the west 100 ft upstream from sampling location.
- Clear, fast running water with no odors. Photo taken

0900 - R. Boyd & A. Lewis on site NSWSD-5S.

0910 - Collect sample NSWSD-5S-2012 (MS/MSD for PAHs only)

- 6-8 oz. amber u/p DRO AK102 PAHs 8270D SIM

0930 - Complete Sediment Sampling Visual Inspection Checklist

Rob Boyd 8/28/12

TO55 AdaK LTM 2012 8/28/12

0930 cont...
- Weather - 54°F, overcast
- Black, loose sediment
- Heavy smell of petroleum
- Heavy sheen observed after sample collection. Photo taken.

0955 - A. Lewis & R Boyd on site NSWSD-4S (South of Runway 18-36)

1000 - Collect sample NSWSD-4S-2012
- 2 - 8 oz amber u/p DRO AK102 PAHs 8270D SIM

1010 - Collect sample NSWSD-14S-2012 (Dup)
- 2 - 8 oz amber u/p PAHs 8270D SIM

1015 - Complete Sediment Sampling Visual Inspection Checklist.
- Weather - 53°F, overcast
- Grey sediment
- Norganic matter
- No odors
- Kreosote pilings between sampling location. Photo taken

1025 - A Lewis & R. Boyd on site NSWSD-2S (South of Runway 18-36)

1030 - Collect sample NSWSD-2S-2012.
- 2 - 8 oz amber u/p DRO AK102 PAHs 8270D SIM

Robert Boyd 8/28/12

TO55 AdaK LTM 2012 8/28/12

1040 - Collect sample NSWSD-12S-2012 (Dup)
- 2 - 8 oz amber u/p DRO AK102

1050 - Complete Sediment Sampling Visual Inspection Checklist.
- Weather - 53°F, overcast
- Black, sandy sediment w/ seaweed.
- Moderate smell of petroleum.
- No man-made debris
- Light sheen seen across sediment 1/4" below surface
- Sheen observed after sample collection. Photo taken

1100 - A. Lewis & R. Boyd on site NSWSD-8 (South of Runway 18-36)

1110 - Collect water quality parameters: pH - 7.04, SC - 4.24 ms/cm, Turb - 8 NTUs, DO - 8.44 mg/L, Temp - 13.4°C, Sal - 0.2% ORP - 121 mV

1115 - Collect sample NSWSD-8-2012
- 9 - 40mL VOC vials w/HCl BTEX 8260C (MS/MSD for BTEX only)
- 2 - 1L amber w/HCl DRO AK102
- 2 - 1L amber u/p PAHs 8270D SIM

1130 - Complete Surface Water Sampling Visual Inspection Checklist.

Robert Boyd 8/28/12

TO55 Adak LTM 2012 8/28/12

1130 cont..
- Weather - 58° F, overcast
- Man-made debris - wood retaining wall SE of sample location, 16" pipe on tressel 15 ft. N of sample location.
- Clear water, good flow, no odors
- Erosion along retaining wall
- Photo taken

1145 - A. Lewis & R. Boyd on site

852S (SWMU 60) & 852 (SWMU 60)

1215 - Collect sample 852S-2012.
- 2 - 8oz amber u/p DRO AK102 PAHs 8270D SIM

1220 - Complete Sediment Sampling Visual Inspection Checklist.
- Weather - 60° F, light wind, overcast.
- Light organic matter, small grain sand, light brown at surface, black 1/8" below surface
- Heavy smell of petroleum
- No man-made debris
- Sheen & color change 1/8" below surface. from lt. brown to black
- Photo taken

1230 - The previously sampled 852 surface water location

Rahwand 8/28/12

TO55 Adak LTM 2012 8/28/12

1230 cont..
was dry, moved down gradient along stream body approx 75 ft, as per Annette Franzen (Seralaska).
~~1240~~ DB 8/28/12

1232 - Collect water quality parameters: pH - 6.21, SC - 14.4 mS/cm, Turb - 20 NTUs, DO - 8.33 mg/L, Temp - 14.4°C, Sal - 0.3‰, ORP - -51 mV

1240 - Collect sample 852-2012
- 3 - 40mL VOC amber vials w/ HCl BTEX 8260C
- 2 - 1L amber w/ HCl DRO AK102
- 2 - 1L amber u/p PAHs 8270D SIM.

1300 - Complete Surface Water Sampling Visual Inspection Checklist.
- Weather - 60° F, light wind, overcast
- Moderate smell of petroleum
- From culvert & boom locations to Sweeper Creek, orange discolored sand/sediment
- Water clear below the surface, orange floating particulate seen, light white foam along surface
- Photo taken.

Rahwand 8/28/12

TO55 AdaK LTM 2012 8/28/12

1315 - Lunch
1400 - South of Runway 18-36 Photo Log
0809 - NSWSD-7 facing SE
0912 - NSWSD-5S sample location top view
0913 - NSWSD-5S facing N
0925 - NSWSD-5S Sheen
0947 - NSWSD-4S facing N
0951 - NSWSD-4S sample location top view
1033 - NSWSD-2S sample location top view.
1033 - NSWSD-2S facing N
1105 - NSWSD-8 facing NW
SWMU 60 Photo Log
1211 - 852 dry facing W
1224 - 852S sample location top view
1224 - 852S facing SW
1225 - 852S facing N
1228 - 852 mod facing W
SA 79 Photo Log (08/27/12)
1427 - 02-230 facing SW
1427 - MRP-MW8 facing
1434 - 601 facing N

RalwtBnd 8/28/12

TO55 AdaK LTM 2012 8/28/12

1500 - De-mob sample van, re-pack samples for overnight storage, re-stock sampling supplies. prep for next day sampling
1900 - End of day

RalwtBnd 8/28/12

TO55 AdaK LTM 2012 8/29/12

0700 - On site office meeting. Mob van. Tailgate Health Safety
SSHO - B. Giles
Topics covered:
Slips, trips, & falls and warning sirens.

0730 - Horiba Calibration

Time	pH	SC mS/cm	Turb	DO	Temp	Sal	ORP
0730	4.00	4.49	0 NTUs	10.25 mg/L	15.06°C	0.2‰	253 mV
1215	3.99	4.50	0 NTUs	10.01	15.15	0.2‰	242 mV
1740	3.99	4.50	0 NTUs	9.89	15.38	0.2‰	233 mV

0735 - PID bump test: 99.9 ppm
0810 - A. Lewis & R. Bayd onsite
02-818 (NMCB) Breathing zone PID: 0.00 ppm
0825 - Collect [DTW = 9.19 ft btoc]
DTP = 9.14 ft btoc PT = 0.05 ft
Did not sample as per CMP.
Sample 02-818-2012 not collected.
0845 - A. Lewis & R. Bayd onsite NMCB
02-817. Breathing zone PID = 0.00 ppm
0850 - Collect [DTW = 10.10 ft btoc]
Set flow rate: 0.5 L/min
0900 - Collect ~~[DTW = EQ 8/29/12]~~ Water quality parameters listed on water sampling log. 50°F, windy, cloudy
Robert Bnd 8/29/12

TO55 AdaK LTM 2012 8/29/12

0912 - Parameters stabilize: Purge 1.5 gal, pH - 6.26, SC - 0.794 mS/cm, Turb - 0 NTUs, DO - 0.00 mg/L, Temp - 7.84°C, Sal - 0.0‰, ORP - 102 mV. Light smell of petroleum also noted.
0915 - Collect Sample 02-817-2012
- 3-40 mL VOC amber vial w/HCl GRO AK101
- 3-40 mL VOC amber vial w/HCl Benzene 8260C
- 2-1 L amber w/HCl DRO AK102

0950 - A. Lewis & R. Bayd onsite
02-461 (NMCB) Breathing zone PID: 0.0 ppm.
1000 - Collect [DTW = 7.03 ft btoc]
Set flow rate: 0.5 L/min
1011 - Collect water quality parameters listed on water sampling log.
50°F, sunny, light wind
1023 - Parameters stabilize: 1.5 gal Purge, pH - 6.31, SC - 0.642 mS/cm, Turb - 4 NTUs, DO - 3.41 mg/L, Temp - 8.07°C, Sal - 0.0‰, ORP - -73. Light smell of petroleum.
1030 - Collect Sample 02-461-2012
- 3-40 mL VOC amber vials w/HCl GRO AK101
- 3-40 mL VOC amber vials w/HCl Benzene 8260C
- 2-1 L amber w/HCl DRO AK102

Robert Bnd 8/29/12

TOSS AdaK LTM 2012 8/29/12

1055 - A. Lewis & B. Boyd on site
02-453 (NMCB). Breathing zone PID: 0.0ppm
1105 - Collect [DTW = 9.42 ft btoc]
Set flow rate: 0.5 L/min.
1108 - Collect water quality parameters listed on water sampling log.
52°F, moderate wind, partial overcast
1120 - Parameters stabilize: Purge 1.5 gal, pH - 6.53, SC - 3.00, Turb - 13 NTUs, DO - 0.00 mg/L, Temp - 8.91°C, Sal - 0.0%, ORP - -93.
Light smell of petroleum.
1125 - Collect Sample 02-453-2012
- 3-40mL VOC amber vial w/HCl GRO AK 101
- 3-40mL VOC amber vial w/HCl Benzene 8260C
- 2-1 L amber w/HCl DRO AK 102

1430 - A. Lewis & R. Boyd onsite
~~DO 8/29/12~~ NMCB-04 (NMCB). Breathing zone PID: 0.0ppm
1435 - Collect [DTW = 12.35 ft btoc]
Set flow rate: 0.5 L/min
1444 - Collect water quality parameters listed on water sampling log. 55°F, moderate wind, partial overcast.
1500 - Parameters stabilize: Purge 2.0 gal, pH 6.41, SC 0.277 mS/cm, Turb - 13 NTUs, DO - 0.0 mg/L

Robert Boyd 8/29/12

TOSS AdaK LTM 2012 8/29/12

1500 cont...
Temp - 7.45°C, Sal - 0.0%, ORP - -66 mV.
Light smell of petroleum.
1510 - Collect sample NMCB-04-2012
- 3-40mL VOC amber vial w/HCl GRO AK101
- 3-40mL VOC amber vial w/HCl Benzene 8260C
- 2-1 L amber w/HCl DRO AK102

1530 - A. Lewis & R. Boyd on site
02-452 (NMCB). Breathing zone PID: 0.0 ppm
1535 - Collect [DTW = 9.73 ft btoc]
Set flow rate: 0.5 L/min
1550 - Collect water quality parameters listed on water sampling log
54°F, moderate wind
1606 - Parameters stabilize: Purge 2.0 gal, pH - 6.49, SC - 0.713 mS/cm, Turb - 0 NTUs, DO - 0.92 mg/L, Temp - 8.53°C, Sal - 0.0%, ORP - -107 mV. Light smell of petroleum
1610 - Collect sample 02-452-2012
- 3-40mL VOC amber vial w/HCl GRO AK101
- 3-40mL VOC amber vial w/HCl Benzene 8260C
- 2-1 L amber w/HCl DRO AK 102.

1620 - Collect sample 02-462-2012 (Dup)
- 3-40mL VOC amber vial w/HCl GRO AK 101.

Robert Boyd 8/29/12

T055 AdaK LTM 2012 8/29/12

1720 - De-mob sample van, store samples for overnight storage, re-stock sampling supplies, QC paperwork.

Late Entry

0825 - 02-818 DTP & DTW measurements were confirmed with Team 2 Interface Probe

1900 - End of day -

Robert Boyd 8/29/12

T055 AdaK LTM 2012 8/30/12

0700 - On site office meeting. Tailgate Health & Safety SSHO - B. Giles

Topics covered: Slips, trips & falls, wind awareness, & GW contaminants in purge water.

0730 - Mob. van.

0745 - Horiba Calibration

Time	pH	SC ms/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0745	3.98	4.49	0.0	10.25	14.78	0.2	244
1245	3.99	4.49	0.0	10.25	13.81	0.2	244

PID bump test: 98.4 ppm

0830 - A. Lewis & R. Boyd on site NMCB-08 (NMCB). Breathing zone PID: 0.1 ppm.

0845 - Collect [DTW = 6.60 ft btoc] Set flow rate: 0.5 L/min.

0900 - Collect water quality parameters listed on water sampling log. 51° F, overcast.

0920 - Parameters Stabilized Purge 2.5 gal, pH - 6.61, SC - 2.08 ms/cm, Turb - 8 NTUs, DO - 0.00 mg/L, Temp - 8.17°C, Sal - 0.0%, ORP - -112 mV Light smell of petroleum, with a few pieces of black particulate throughout purge.

Robert Boyd 8/30/12

TO55 AdaK LTM2012 8/30/12

0925 - Collect sample NMCB-08-2012
- 3-40mL VOC amber vial w/HCl GRO AK101
- 3-40mL VOC amber vial w/HCl Benzene 8260c
- 2-1L amber w/HCl DRO AK102

0935 - Collect sample NMCB-18-2012 (Dup)
- 3-40mL VOC amber vial w/HCl Benzene 8260c
- 2-1L amber w/HCl DRO AK102

1000 - A. Lewis & B. Bayd on site E-201 (NMCB). Breathing zone PID: 0.0ppm

1015 - Collect [DTW = 13.47 ft btoc] set flow rate: 0.5L/min

1022 - Collect water quality parameters listed on watersampling log. 51° F, overcast, light wind.

1040 - Parameters did not stabilize: Purge 3gal (3 x casing volume = 2.59gal), pH - 6.41, SC - 0.298mS/cm, Turb - 15 NTUs, DO - 1.94 mg/L, Temp - 6.06°C, Sal - 0.0%, ORP - -99 mV. Light smell of petroleum.

1055 - Collect sample E-201-2012
- 3-40mL VOC amber vial w/HCl GRO AK101.
- 3-40mL VOC amber vial w/HCl Benzene 8260c
- 2-1L amber w/HCl DRO AK102.

Robert Boyd 8/30/12

TO55 AdaK LTM2012 8/30/12

1300 - Pack samples for shipment on Alaska Airlines.

1430 - A. Lewis & R. Boyd to Alaska Airlines to ship 7 Team 1 coolers, 5 Team 2 coolers, & 2 Horibas.

1700 - A. Lewis to Alaska Airlines to pick-up Aaron Vernik (NAVFAC RPM)

1930 - Pick-up 13 coolers from CAS, 2 Horibas, & 1 interface meter.

1945 - End of day.

Robert Boyd 8/30/12

TO55 Adak LTM 2012 8/31/12

0700 - On site office meeting
Tailgate Healthy Safety
SSHO - B. Giles
Topics covered:
Proper PPE (Level D), animal awareness, & PFDs.

0740 - Horiba Calibration

Time	pH	SC ms/cm	Turb NTUs	DO %	Temp °C	Sal %	ORP mV
0740	3.99	4.49	0	10.57	13.97	0.2	253
1315	3.97	4.50	0	10.41	13.81	0.2	245
1645	3.98	4.52	0	10.35	14.63	0.2	244

PID bump test: 98.1 ppm

0750 - Mob van for sampling
Team 1 will be using peristaltic pump # 1132516, because we observed peristaltic pump #1133289 switching pump direction from forward to reverse without the operator doing so.

0830 - A. Lewis perform dual span specific conductivity calibration on the Horibas that arrived yesterday on Alaska Airlines flight.

Reviewed 8/31/12

TO55 Adak LTM 2012 8/31/12

0940 - A Lewis & R. Bayel on site 12-114 (SWMU 58). Breathing zone PID: 0.0 ppm.

0950 - Collect [DTW = 9.98 ft btoc]
set flow rate: 0.5 L/min

1000 - Collect water quality parameters listed on water sampling log. 52°F, overcast, fog, windy.

1032 - Parameters did not stabilize. Purge 4 gal (3x casing volume = 3.80 gal), pH - 5.73, SC - 0.362 ms/cm, Turb - 0.0 NTUs, DO - 0.00 mg/L, Temp - 6.94°C, Sal - 0.0%, ORP - 14 mV. NO odor.

1035 - Collect sample 12-114-2012
• 2 - 1 L amber w/ HCl DRO AK 102

1100 - A. Lewis & R. Bayel on site 12-105 (SWMU 58). Breathing zone PID: 0.0 ppm,

1110 - Collect [DTW = 10.73 ft btoc]
set flow rate: 0.5 L/min

1120 - Collect water quality parameters listed on water sampling log. 52°F, light wind, light fog.

Reviewed 8/31/12

TO55 Adak LTM 2012 8/31/12

1130 - Parameters stabilize: Purge 20 gal, pH-6.17, SC-0.694 mS/cm, Turb-0.0 NTUs, DO-0.00 mg/L, Temp-9.22°C, Sal-0.0%, ORP--61 mV. Light smell of sulfur.

1140 - Collect sample 12-105-2012
- 2-1L amber w/HCl DRO AK102.

1200 - A. Lewis & R. Byrd on site 12-203 (SWMU 58). Breathing zone PID: 0.0 ppm.

1210 - Collect [DTW=12.70 ft btoc] set flow rate: 0.5 L/min.

1219 - Collect water quality parameters listed on water sampling log. 51°F, overcast, wind.

1239 - Parameters stabilize: Purge 2.5 gal, pH-6.50, SC-0.971 mS/cm, Turb-5 NTUs, DO-0.00 mg/L, Temp-6.98, Sal-0.0%, ORP--118 mV. Light smell of petroleum.

1245 - Collect sample 12-203-2012
- 2-1L amber w/HCl DRO AK102

1405 - A. Lewis & R. Byrd on site 12-121 (SWMU 58). Breathing zone PID: 0.0 ppm

Relinquished 8/31/12

TO55 Adak LTM 2012 8/31/12

1415 - Collect [DTW=13.86 ft btoc]
DTP=13.86 ft btoc PT=0.03
Allowed well to depressurize to confirm PT measurement
Product bailing sock was removed 8/29/12 by Team 3. Did not sample as per CMP, Sample 12-121-2012 not collected.

1445 - 12-601 Seep & Shoreline Visual Inspection Checklist.
- Seep not located. Photos taken.
- Vegetation growing along shoreline.
- Man-made debris: 2 fallen 15 ft wooden powerline poles to the south, pipeline with wooden supports (appears to be abandoned). water in drainage w/ orange particulate (~1 inch water), cableline to the south, & 6" metal culvert ~25 ft south of 12-611. Powerline poles appear to be covered with creosote, possibly contributing to contamination.

1645 - Download 1998 Ford E-150 owners manual.

Relinquished 8/31/12

TO55 Adak LTM 2012 8/31/12

1745 - Deliver 1998 Ford E-150 manual to Muggs so he can troubleshoot Team 2 van repairs.

1800 - QC paperwork, de-mob van.

1900 - End of day.

Relinquished 8/31/12

TO55 Adak LTM 2012 9/1/12

0700 - On site office meeting, Tailgate Health & Safety SSHO - B. Giles

Topics covered: Wind awareness, rommel stakes, slips, trips, & falls.

0745 - Mob van

0855 - Horiba Calibration

Time	pH	SC mS/cm	Turbidity NTUs	DO mg/L	Temp °C	Sal ‰	ORP mV
0855	3.99	4.53	0	10.26	14.18	0.2	252
1330	3.99	4.53	0	10.22	14.15	0.2	226
1700	3.98	4.53	0	10.21	14.14	0.2	222

1000 - A. Lewis, R. Boyd, & A. Vernik on site NL-04 (SWMU 61) Due to heavy rain event, site is inundated with water. Unable to collect SW & sed samples at this time. We return after water level recedes. Team 3 onsite documented high water.

1100 - De-mob SWMU 61 sampling gear, mob for former Power Plant sampling. PID bump test: 99.2 ppm

1225 - A. Lewis & R. Boyd on site NL-08S (Former Power Plant)

Relinquished 9/1/12

TO55 Adak LTM 2012 9/1/12

1230 - Complete Sediment Sampling Visual Inspection Checklist. 51°F, Rain, wind
- Sediment contamination suspected - dark grey/black, light brown at 1/8" surface. Light sheen at surface observed when disturbed.
- Man-made debris observed - 55 gallon drum (empty) approximately 10 ft from sample location.

1240 - Collect sample NL-08S-2012
- 2-8oz amber jar DRO AK102 & PAHs 8270D SIM

1245 - A. Lewis on site NL-08 (Former Power Plant). 51°F, Rain, wind

1300 - Collect Sample NL-08-2012
- 3-40mL VOC amber vial w/ HCl BTEX 8260C
- 6-1L amber w/ HCl DRO AK 102 (MS/MSD)
- 2-1L amber u/p PAHs 8270D SIM

1320 - Complete Surface Water Sampling Visual Inspection Checklist.
- Sheen visible from access to water.
- Faint smell of petroleum
- Man-made debris - Empty 55gal drum ~10 ft from sample location.

Robert Boyd 9/1/12

TO55 Adak LTM 2012 9/1/12

Late Entry

1300 - NL-08-2012 water quality parameters: pH - 6.59, SC - 0.840 mS/cm, Turb - 11 NTUs, DO - 9.44 mg/L, Temp - 13.9°C, Sal - 0.0%, ORP - -41 mV

1410 - A. Lewis & R. Boyd on site where 01-151 should be located

1425 - Pick up A. Vernik (Navy RPM)

1435 - On site where 01-151 should be located. Well was likely removed during Summer 2012 soil removal and monitoring well installation petroleum investigation by Antea Environmental.

1450 - Do not sample new well in 01-151 location, as per A. Vernik. New well had faint ID markings apparently reading MW-5002

1500 - A. Vernik off site.

1510 - A. Lewis and R. Boyd on site Former Power Plant East Canal for Seep and Shoreline Visual Inspection Checklist. 51°F, overcast, moderate winds.
- Seeps located at booms 9, 12, 11. Not flowing

Robert Boyd 9/1/12

TO55 AdaK LTM 2012 9/1/12

1510 cont....
- Seeps previously documented.
- Moderate petroleum odor near boom locations.
- Shoreline discolored by suspected contamination. Petroleum stained rocks & sediment along boom locations approximately 300 ft² (150ft x 2ft).
- Man-made debris: rusty drum in East Canal adjacent to NL-08, as previously documented. Tire & one piece scrap metal approximately 125 ft south of NL-08. New ~75 ft section of remediated shoreline up gradient from booms.

1545 - A. Lewis & R. Boyd on site OH-158 (SA 80), for monitoring well gauging visual inspection checklist. See form.
- Heavy petroleum odor.
- [DTW = 19.08 ft btoc], DTB = 25.07 ft btoc soft bottom.
- PID: 0.0 ppm all locations
- Sock in well removed.

Rebecca Boyd 9/1/12

TO55 AdaK LTM 2012 9/1/12

1600 - A. Lewis & R. Boyd on site. OH-173 (SA80), for Monitoring Well Gauging Visual Inspection Checklist. See form.
- Heavy petroleum odor
- Sheen present < 0.01 ft PT.
- [DTW = 14.60 ft btoc], DTB = 26.48 ft btoc soft bottom.
- PID at well head: 2.0 ppm Breathing zone: 0.0 ppm
- Sock in well removed.

1625 - A. Lewis, R. Boyd, & J. Highstone on site OH-155 (SA 80) for Monitoring Well Gauging Visual Inspection Checklist. See form.
- Heavy petroleum odor
- [DTW = 15.98 ft btoc] DTB = 25.41 ft btoc soft bottom.
- PID at well head: 8 ppm Breathing zone: 0 ppm

1700 - On site office to de-mob, COC paperwork, prep samples for overnight storage, prep for next day's work.

Rebecca Boyd 9/1/12

T055 Adak LTM 2012 9/1/12

1730 - Former Power Plant Photo Log

Time	Description
1522	East Canal Seep_Shoreline Inspection Boom 9,12 Culverts facing W
1520	East Canal Seep_Shoreline Inspection Boom 9,12 facing N
1503	East Canal Seep_Shoreline Inspection facing N (2)
1505	" " (3)
1510	" " (4)
1511	" " (5)
1520	" " (6)
1501	East Canal Seep_Shoreline Inspection facing N.
1522	East Canal Seep_Shoreline Inspection facing S (2)
1522	East Canal Seep_Shoreline Inspection facing S
1521	East Canal Seep_Shoreline Inspection New Remediated Shoreline Area facing N (2)
1521	East Canal Seep_Shoreline Inspection New Remediated Shoreline Area facing N
1521	East Canal Seep_Shoreline Inspection New Remediated Shoreline Area facing NW (2)

Robert Bird 9/1/12

T055 Adak LTM 2012 9/1/12

1730 cont...

Former Power Plant Photo Log

Time	Description
1521	East Canal Seep_Shoreline Inspection New Remediated Shoreline Area facing NW.
1524	East Canal Seep_Shoreline Inspection Sheen Along Seep & Boom 9,12.
1441	Former location of 01-151 facing E
1345	NL-08 sample location top view
1342	NL-088 facing W

SA 80 Photo Log

1627	04-155	Top view
1614	04-173	Top view
1556	04-158	Top view

SWMU 58 Photo Log (8/31/12)

1452	12-601	creosote pole facing N
1452	12-601	facing E
1447	12-601	facing S (2)
1446	12-601	facing S
1452	12-601	facing SW

1900 - End of day

Robert Bird 9/1/12

0955 Adak LTM 2012 9/3/12

0700 - On site office meeting
Tailgate Health & Safety
SSHO - B. Giles
Topics covered:
Wind safety & awareness & earthquakes.

0730 - Horiba Calibration

Time	pH	SC mS/cm	Turbidity	DO mg/L	Temp C°	Sal %	ORP mV
0830	3.99	4.49	0.0	10.48	13.12	0.2	263
1130	3.99	4.50	0.0	10.56	12.31	0.2	234
1430	3.99	4.48	0.0	10.69	12.29	0.2	241

PID bump test: 97.7 ppm

0818 R Boyd & Sherri Wunderlich on Site 04-159 (SA 80) Breathing zone PID 0.0 ppm
[Collect DTW = 23.20 ft btoc]
Set flow rate: 0.2 L/min
50°F, rain, heavy wind

0955 increased flow rate to 0.5 L/min
Parameters did not stabilize purged 3X casing volume, 5.125 gal

1020 pH = 6.51, cond = 0.480 ms/cm, turbidity = 160 NTU, DO = 1.70 mg/L temp = 6.73°C, salinity 0 %, redox -107 mV

1025 Collect sample 04-159-2012

Sherri L Wunderlich 9/3/12

0955 Adak LTM 2012 9/3/12

1025 cont • 2 x 1 L amber w/ HCl, DRO (AK102) packed samples bottles

1040 At bunker to transfer purge water to drum

1100 At units to check weather & Horiba calibration

1150 R Boyd & S Wunderlich on site 04-158 (SA 80). Breathing zone PID 0.0 ppm
[Collect DTW = 18.21 ft btoc]
50°F, rain, heavy wind
set flow rate at 0.5 L/min

1246 parameters stabilize, purge 2.5 gal. pH = 6.03, SC = 0.480 ms/cm, turbidity = 700 NTU, DO = 0.00 mg/L, temp 7.74°C, salinity = 0.0 %, ORP = -31 mV
moderate smell of petroleum, sheen black & orange particulates in purge water

1250 collect sample 04-158-2012
• 2 x 1 L amber w/ HCl, DRO (AK102)

1305 At bunker to transfer purge water to drum

1415 On site office to de-mob

Sherri L Wunderlich 9/3/12

T055 Adak LTM 2012 9/3/12

1415 Repack samples for overnight storage, clean van & restock sampling supplies, Prep for next day sampling

1530 End of day

T055 Adak LTM 2012 9/4/12

0700 - On site office meeting Tailgate Health & Safety Mob van. SSHO - B Giles

Topics covered:
wind awareness & safety,
Cold Stress

0750 - Horiba Calibration

Time	pH	SC ms/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0750	3.98	4.49	0.0	10.84	12.06	0.2	255
1230	3.99	4.52	0.0	10.63	11.98	0.2	242
1715	3.99	4.51	0.0	11.00	11.62	0.2	238

0815 - A. Lewis & R. Bayci on site
OH-173 (SH 80) Breathing zone
PID: 0.0 ppm

0825 - Collect [DTW = 14.43 ft btoc]
Set flow rate: 3.5 L/min

0844 - Collect water quality parameters listed on water samplins log. 50°F. heavy wind, rain.

0856 - Parameters stabilize: Purge 2.5gal, pH - 6.19, SC - 0.409 ms/cm, Turb - 9 NTUs, DO - 0.00 mg/L, Temp - 6.05°C, Sal - 0.0%, ORP - -45 mV. Moderate smell of petroleum. Black particulate at initial.

Robert Bayci 9/4/12

T055 AdaK LTM 2012 9/4/12

0856 cont...
Fine black particulate seen throughout sample and at time of sample.
0900 - Collect sample 04-173-2012
• 2-1L amber w/HCl DRO AK102
0935 - A. Lewis & R. Boyd on site 04-801 (SA80). Breathing zone PID: 0.0 ppm.
~~0944 RB 9/4/12~~
0940 - Collect [DTW = 21.21 ft btoc]
Set flow rate: 0.5L/min
0944 - Collect water quality parameters listed on water sampling log. 52°F, moderate wind, overcast
1012 - Parameters do not stabilize: Purge 3.5 gal (~~>3x~~ >3x casing volume = 3.19 gal), pH - 5.63, SC - 0.239 mS/cm, Turb - 22 NTUs, DO - 6.07 mg/L, Temp - 6.14°C, Sal - 0.0%, ORP - 219 mV. No odor
1015 - Collect sample 04-801-2012
• 2-1L amber w/HCl DRO AK102.
1055 - A. Lewis & R. Boyd on site SP4-3 (SA80). Breathing zone PID: 0.0 ppm.
Rebecca Boyd 9/4/12

T055 AdaK LTM 2012 9/4/12

1105 - Collect [DTW = 19.96 ft btoc]
Set flow rate: 0.5L/min
1108 - Collect water quality parameters listed on water sampling log. 52°F, moderate wind, rain.
1140 - Parameters stabilize: Purge 4 gal (>3x casing volume removed), pH - 6.30, SC - 0.481 mS/cm, Turb - 124 NTUs, DO - 0.00 mg/L, Temp - 6.24°C, Sal - 0.0%, ORP - -63 mV. No odor. NTUs rose, but water was clear.
1145 - Collect sample SP4-3-2012
• 2-1L amber w/HCl DRO AK102
1400 - A. Lewis & R. Boyd on site 05-735 (SWMU17). Breathing zone PID: 0.0 ppm
1410 - Collect [DTW = 15.98 ft btoc]
Set flow rate: 0.5L/min
1415 - Collect water quality parameters listed on water sampling log: 55°F, overcast, light wind.
1431 - Parameters stabilize: Purge 2.0 gal, pH - 6.61, SC - 0.525 mS/cm, Turb - 19 NTUs, DO - 0.00 mg/L, Temp - 7.05°C, Sal - 0.0%, ORP - -76 mV. No odor.
Rebecca Boyd 9/4/12

TO55 Adak LTM 2012 9/4/12

1440 - Collect sample 05-735-2012
- 3-40mL VOC amber vial w/HCl
  VOCs (PCE+daughters) 8260c

1445 - Collect sample 05-745-2012 (Dup)
- 3-40mL VOC amber vial w/HCl
  VOCs (PCE+daughters) 8260c

1450 - Monitoring Well Gauging
Visual Inspection Checklist. See form.
- [DTW = 15.98 ft btoc]
- DTB = 21.80 ft btoc hard bottom
- 3 bollards present
- Site Conditions: within 75 ft of well 5 heavy duty batteries, 15 pallets of crushed oil drums, 2 white 30 gal drums, 1 yellow 55 gal drum labeled Hazardous Substance. See photos.

1530 - A. Lewis & R Boyd on site R-1 (SWMU 17). Breathing zone PID: 0.0 ppm

1535 - Collect [DTW = 2.24 ft btoc]
Set flow rate: 0.5 L/min

1543 - Collect water quality parameters listed on water sampling log
55°F, overcast, light wind.

Robert Boyd 9/4/12

TO55 Adak LTM 2012 9/4/12

~~1610~~ RB 9/4/12

1603 - Parameters stabilize: Purge 1.5 gal
pH - 6.47, SC - 0.482 mS/cm, Turb - 3 NTUs,
DO - 1.48 mg/L, Temp - 7.62°C, Sal - 0.0%,
ORP - -23 mV. Light smell of petroleum.

1610 - Collect sample R-1-2012
- 2-1 L amber w/HCl DRO AK 102

1615 - Monitoring Well Gauging
Visual Inspection Checklist. See form
- [DTW = 2.24 ft btoc]
- DTB = 17.07 ft btoc Soft bottom
- 3 bollards present
  See photos

1700 - ~~SW~~ RB 9/4/12 A. Lewis & R. Boyd on site office to de-mob. QC paperwork, download photos, & store samples, Prep for tomorrow.

SWMU 17 Photo Log

Time	Description
1448	05-735_Drum_facing W
1448	05-735_Tank_Batteries_facing N
1448	05-735_DrumPallets_facing W
1448	05-735_SewerCleaner_facing S
1448	05-735_~~facing E~~ RB 9/4/12 facing W
1624	R-1_facing E

Robert Boyd 9/4/12

- TO55 Adak LTM 2012 9/4/12

1900 - End of day

Relinquished 9/4/12

TO55 Adak LTM 2012 9/5/12

0700 - On site office meeting
Tailgate Health & Safety
SSHO - B. Giles
Topics covered:
wind awareness, possible tsunami

0730 - Mob van for sampling

0815 - Horiba Calibration

Time	pH	SC ms/cm	Turbidity	DO mg/L	Temp °C	Sal %	ORP mV
0815	3.98	4.51	0.0	10.81	11.95	0.2	254
1230	3.99	4.49	0.0	10.27	12.08	0.2	244
1730	3.98	4.53	0.0	9.81	15.21	0.2	230

PID bump test: 98.3 ppm

0900 - A. Lewis & R. Boyd on site
05-375 (SWMU 17). Breathing zone PID: 0.0 ppm

0915 - Collect [OTW = 433 ft bgs] set flow rate: 0.5 L/min

0926 - Collect water quality parameters listed on water sampling log. 52°F, overcast.

0938 - Parameters stabilize: Purge 1.5 gal, pH 6.19, SC 0.444 ms/cm, Turb 4 NTUs, DO 0.00 mg/L, Temp 10.37°C, Sal 0.0%, ORP -45 mV. Light smell of petroleum.

Relinquished 9/5/12

T055 Adak LTM 2012 9/5/12
0945 - Collect sample 05-375-2012
• 2-1L amber w/HCl DRO AK102
0950 - Complete Monitoring Well Gauging Visual Inspection Checklist
• [DTW = 4.33 ft btoc]
• DTB = 14.91 ft btoc
• Cracked monument as noted in other inspections.
1025 - A. Lewis & R. Boyd on site PP-05 (SWMU 17). Breathing zone PID: 0.0 ppm
1035 - Collect [DTW = 10.91 ft btoc] Set flow rate: 0.2 L/min due to drawdown noted in previous sampling events.
1048 - Collect water quality parameters listed on water sampling log. 52°F, overcast.
1118 - Parameters stabilized: Purge 1.5 gal, pH - 6.41, SC - 0.666 mS/cm, Turb - 43 NTUs, DO - 0.00 mg/L, Temp - 8.35°C, Sal - 0.0%, ORP - -56 mV
1125 - Collect sample PP-05-2012
• 2-1L amber w/HCl DRO AK102

Robert Boyd 9/5/12

T055 Adak LTM 2012 9/5/12
1130 - Monitoring Well Gauging Visual Inspection Checklist complete
• [DTW = 10.91 ft btoc]
• DTB = 16.39 ft btoc Hard bottom
• Monument has surface rust and lid is hard to open.
1300 - Contact Poolu in order to gain access to Runway 5-23. Call Vince @ 907-572-9960 (DOT) for clearance to cross runway.
1350 - A. Lewis & R. Boyd on site 14-100 (Runway 5-23). Breathing zone PID: 0.0 ppm.
1355 - Collect [DTW = 2.56 ft btoc] Set flow rate: 0.5 L/min
1400 - Collect water quality parameters listed on water sampling log. 52°F, overcast
1412 - Parameters stabilize: Purge 1.5 gal, pH - 6.39, SC - 0.488 mS/cm, Turb - 18 NTUs, DO - 0.00 mg/L, Temp - 8.97°C, Sal - 0.0%, ORP - -70 mV. Clear, no odor.
1415 - Collect sample 14-100-2012
• 3-40mL VOC amber vial w/HCl GRO AK101

Robert Boyd 9/5/12

TO55 Adak LTM 2012 9/5/12

1420 - Monitoring Well Gauging
Visual Inspection Checklist Complete
- [DTW = 2.56 ft btoc]
- DTB = 12.92 ft btoc (Hard bottom)
- Light surface rust on monument

1430 - A. Lewis & R. Boyd on site.
L4-110 (Runway 5-23). Breathing zone PID: 0.0 ppm

1435 - Collect [DTW = 2.78 ft btoc]
Set flow rate: 0.5 L/min

1441 - Collect water quality parameters listed on water sampling log.
52°F, overcast

1457 - Parameters stabilize: Purge 2.0 gal, pH - 6.30, SC - 0.474 mS/cm, Turb - 1 NTUs, DO 0.00 mg/L, Temp - 10.16°C, Sal - 0.0%, ORP - -69 mV. Clear, No odor

1510 - Collect sample L4-110-2012
- 3-40mL VOC amber vial w/ HCl (GPO AK101

1520 - Monitoring Well Gauging
Visual Inspection Checklist complete.
- [DTW = 2.78 ft btoc]
- DTB - 11.37 ft btoc. Monument surrounded by water.
- Light surface rust on monument

Robert Boyd 9/5/12

TO55 Adak LTM 2012 9/5/12

1600 - A. Lewis & R. Boyd to SES Bunker to transfer SWMU17 purge water to CERCLA drum pending analysis.

1700 - On site office to de-mob, re-stock sample van, QC paperwork, download photos, prep samples for overnight storage.

1730 - SWMU17 Photo log

Time	Description
0955	05-375_facing E
1151	PP-05_facing NW
1152	SWMU17_SiteOverview_facing E

Runway 5-23 Photo Log

Time	Description
1422	14-100_facing NW
1509	14-110_facing S

1900 - End of Day

Robert Boyd 9/5/12

TOSS Adak LTM 2012 9/6/12

0700 - On site office meeting
Tailgate Health & Safety
SSHO - B Giles
Topics covered:
wind safety and cold stress
0730 - Mob sampling van.
0750 - Horiba Calibration

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp C	Sal %	ORP mV
0750	3.99	454	0.0	11.13	11.47	0.2	259
1330	3.91	4.52	0.0	10.79	11.68	0.2	252
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

0840 - A. Lewis & R. Bayd on site
NL-D-04 & NL-D-04S (SWMU 61)
0845 - Collect surface water quality parameters listed on water sampling log: pH-5.98, SC-0.159 mS/cm, Turb-4 NTUs, DO-9.02 mg/L, Temp-9.27°C, Sal-0.0%, ORP-123 mV 50°F, moderate wind, partial sun.
0850 - Collect sample NL-D-04-2012
- 3-40mL VOC amber vial w/HCl GRO AK101
- 3-40mL VOC amber vial w/HCl BTEX 8260C
- 2-1L amber w/P PAHs 8270D SIM

0900 - Complete Surface Water Sampling Visual Inspection Checklist
- No sheen or visible contamination, water clear.

Robert Bayd 9/6/12

TOSS Adak LTM 2012 9/6/12

0910 - Collect Sample NL-D-04S-2012
- 2-4oz tared amber w/25mL surrogated MeOH GRO AK101
- 3-4oz tared amber w/25mL non surrogated MeOH BTEX 8260C (MS/MSD)
- 2-2oz amber Dry Weight Determination

Sediment Sampling Visual Inspection Checklist complete.
- Sediment dark brown silty clay w/ plant roots. Contamination not suspected.
- No odors.

0945 - A. Lewis, S. Wunderlich, & R. Bayd on site NL-04 (SWMU 61).
0950 - Collect surface water quality parameters listed on water sampling log: pH-6.24, SC-0.166mS/cm, Turb-5 NTUs, DO-9.41mg/L, Temp-8.96°C, Sal-0.0%, ORP-51mV. 51°F, moderate wind, partial overcast.
1000 - Collect Sample NL-04-2012
- 3-40mL VOC amber vial w/HCl GRO AK101
- 3-40mL VOC amber vial w/HCl BTEX 8260C
- 2-1L amber w/P PAHs 8270D SIM

No sheen or visible contamination, clear water, no odors

Robert Bayd 9/6/12

TO55 Adak LTM 2012 9/6/12

1015 - Collect sample NL-04S-2012
- 2-4oz tared amber w/ 25 mL surrogated MeOH GRO AK101
- 2-4oz tared amber w/ 25 mL non-surrogated MeOH BTEX 8260C
- 2-2oz amber Dry Weight Determination

1030 - Collect sample NL-14S-2012 (Dup)
- 2-4oz tared amber w/ 25mL surrogated MeOH GRO AK101
- 2-4oz tared amber w/ 25mL non-surrogated MeOH BTEX 8260C
- 2-2oz amber Dry Weight Determination

Sediment Sampling Visual Inspection Checklist Complete
- Sediment dark brown silty clay w/ organics (roots). Contamination not suspected.

1100 - A. Lewis, S. Wunderlich, R. Bayel on site office to QC paperwork, prep samples for Alaska Airlines Shipment to CAS, download photos

1230 - SWMU 61 Photo Log

Time	Description
0935	NL-D-04S_LocationTopView
0944	NL-D-04_facing NE

Robert Bayel 9/6/12

TO55 Adak LTM 2012 9/6/12

1230 cont...

SWMU 61 Photo Log

Time	Description
1032	NL-04S_LocationTopView
1032	NL-04_facing NE

1430 - Drop coolers off at Alaska Airlines

1700 - De-mob sample van & restock

1900 - End of day.

Robert Bayel 9/6/12

TO55 Adak LTM 2012 9/7/12

0700 - On site office meeting
Tailgate Health & Safety
SSHO - B. Giles
Topics covered:
Vehicle safety, suspected UXO awareness, safe breathing zone (PID)

0730 - Mob van for sampling event.

0830 - Horiba Calibration

Time	pH	SC ms/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0830	3.98	4.52	0.0	11.06	11.49	0.2	262
1230	3.98	4.54	0.0	10.86	12.37	0.2	252
1400	3.98	4.54	0.0	10.41	15.17	0.2	229

PID bump test: 96.3 ppm

0910 - A. Lewis & R. Boyd on site
08-202 (ROICC). Breathing zone PID 0.0 ppm

0920 - Collect [DTW = 2.74 ft btoc]
Set flow rate: 0.5 L/min

0928 - Collect water quality parameters listed on water sampling log
50°F, overcast.

0940 - Parameters stabilize: Purge 1.5 gal.
pH - 6.58, SC - 1.14 ms/cm, Turb - 4 NTUs, DO - 0.00 mg/L,
Temp - 7.77°C, Sal - 0.1%, ORP - 120 mV.

Robert Boyd 9/7/12

TO55 Adak LTM 2012 9/7/12

0940 cont...
Light yellow water, no odor or sheen.

0945 - Collect sample 08-202-2012
- 3-40mL VOC amber vial w/HCl
Benzene 8260c

0950 - Complete Monitoring Well Gauging Visual Inspection Checklist.
- [DTW = 2.74 ft btoc]
- DTB = 14.75 ft btoc (soft bottom)
- Light surface rust on monument.

1000 - A. Lewis & R. Boyd on site
08-200 (ROICC). Breathing zone
PID: 0.0 ppm

1005 - Collect [DTW = 4.08 ft btoc]
Set flow rate: 0.5 L/min

1010 - Collect water quality parameters listed on water sampling log
50°F, overcast

1022 - Parameters stabilize: Purge 1.5 gal.
pH - 6.52, SC - 1.76 ms/cm, Turb - 0.0 NTUs,
DO - 0.00 mg/L, Temp - 8.37°C, Sal - 0.1%,
ORP - -115 mV. Water clear, no colors.

1030 Collect Sample 08-200-2012
- 3-40mL VOC amber vial w/HCl Benzene 8260c

Robert Boyd 9/7/12

TO55 Adak LTM 2012 9/7/12

1035 - Complete Monitoring Well Gauging Visual Inspection Checklist
- [DTW = 4.08 ft btoc]
- DTB = 16.16 ft btoc (Hard bottom)
  During DTB measurement, probe was catching on bottom of well screen.
- Surface rust on monument.

1045 - A. Lewis & R. Boyd on site. 08-175 (ROICC). Breathing zone PID: 0.0 ppm.

1055 - Collect [DTW = 3.38 ft btoc]
  Set flow rate: 0.5 L/min

1058 - Collect water quality parameters list on water sampling log. 50°F, overcast, light mist.

1110 - Parameters stabilized: Purge 1.5 gal, pH 6.42, SC - 0.904, Turb - 5 NTUs, DO - 0.00 mg/L, Temp - 8.15°C, Sal - 0.0%, ORP - -89 mV. Clear water, odorless, light orange particulate seen throughout purge.

1115 - Collect sample 08-175-2012
- 3 - 40mL VOC amber vial w/HCl
  Benzene 8260C

1125 - Complete Monitoring Well Gauging Visual Inspection Checklist

Robert Boyd 9/7/12

TO55 Adak LTM 2012 9/7/12

1125 cont...
- [DTW = 3.38 ft btoc]
- DTB = 11.05 ft btoc (Hard bottom)
- Light surface rust on monument

1330 - A. Lewis & R. Boyd on site MW-134-11 (SWMU62 Sandy Cove) Breathing zone PID: 0.0 ppm

1340 - Collect [DTW = 18.10 ft btoc]
  Set flow rate: 0.5 L/min

1342 - Collect water quality parameters listed on water sampling log. 51°F, light wind, mist.

1358 - Parameters stabilized: Purge 2.0 gal, pH - 6.39, SC - 0.927 mS/cm, Turb - 7 NTUs, DO - 0.61 mg/L, Temp - 7.18°C, Sal - 0.0%, ORP - -80 mV (3 x casing volume = 1.68 gal). Clear, odorless water

1405 - Collect sample MW-134-11-2012
- 2 - 1L amber w/HCl DRO AK102

1500 - A. Lewis & R. Boyd on site MW-187-1 (SWMU62 Sandy Cove) Breathing zone PID: 0.0 ppm

1510 - Collect [DTW = 19.03 ft btoc]
  set flow rate: 0.5 L/min

Robert Boyd 9/7/12

TO55 Adak LTM 2012 9/7/12

1513 - Collect water quality parameters listed on water ~~quality~~ sampling log. 51°F, light wind, mist.

1529 - Parameters do not stabilize: Purge 2.0 gal (3x casing volume = 1.56 gal), pH - 6.29, SC - 0.532 mS/cm, Turb - 7 NTUs, DO - 0.00 mg/L, Temp - 6.61°C, Sal - 0.0%, ORP - -50 mV. Water clears & odorless.

1540 - Collect sample MW-187-1-2012
- 2 - 1L amber w/HCl DRO AK 102

1800 - On site bunker to dispose of PPE & sample tubing.

1830 - On site office to demob, download photos, & QC paperwork.

1850 - ROICC Photo Log

Time	Description
0953	08-202_facing S
1036	08-200_facing E
1120	08-175_facing N

1900 - End of day

Robert Boyd 9/7/12

TO55 Adak LTM 2012 9/8/12

0700 - On site office meeting
Tailgate Health & Safety
B. Giles - SSHO
Topics covered:
wind awareness, hantavirus

0730 - Mob sample van

0740 - Horiba Calibration

Time	pH	SC mS/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0740	3.97	4.52	0.0	10.93	12.02	0.2	262
1230	3.99	4.57	0.0	10.93	11.70	0.2	247
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

PID bump test: 96.7 ppm

0840 - ~~On~~ Arrives A. Lewis & R. Boyd on site

03-155 (SWMU 62 Sandy Cove)
Breathing zone PID.

0850 - Collect [DTW = 18.93 ft btoc]
set flow rate 0.5 L/min

0859 - Collect water quality parameters listed on water sampling log. 50°F, overcast, mist.

0919 - Parameters do not stabilize: Purge 2.5 gal (3x casing volume = 1.82 gal), pH - 5.97, SC - 0.253 mS/cm, Turb - 1 NTUs, DO - 1.61 mg/L, Temp - 6.65°C, Sal - 0.0%, ORP - -15 mV. Light yellow water, odorless

Robert Boyd 9/8/12

TO55 Adak LTM 2012 9/8/12

0925 - Collect sample 03-155-2012
- 2-1L amber w/ HCl DRO AK 102

0930 - Complete Monitoring Well Gauging Visual Inspection Checklist
- [DTW = 18.93 ft btoc]
- DTB = 25.00 ft btoc (Hard bottom)
- Surface rust on monument

0955 - A. Lewis & R. Boyd on site 03-619 (SWMU62 Sandy Cove).
Breathing zone PID = 0.0 ppm

1005 - Collect [DTW = 16.34 ft btoc]
Set flow rate: 0.5L/min.

1007 - Collect water quality parameters listed in water sampling log. 50°F, overcast.

1027 - Parameters stabilize: Purge 2.5gal, pH-6.30, SC-0.606mS/cm, Turb-0.0NTUs, DO-0.20mg/L, Temp-6.67°C, Sal-0.0%, ORP-95. Clear odorless water.

1035 - Collect sample 03-619-2012 (MS/MSD)
- 6-1L amber w/ HCl DRO AK 102

1040 - Complete Monitoring Well Gauging Visual Inspection Checklist.
- [DTW = 16.34 ft btoc] DTB = 22.85 ft btoc (Soft bottom)
- Light surface rust on monument.

Relinquished 9/8/12

TO55 Adak LTM 2012 9/8/12

1200 - On site office to de-mob van, prep samples for overnight storage, restock sample van.

1300 - Pick up Scott Elkind for site visits

1700 - On site office to QC paperwork.

1900 - End of day.

Relinquished 9/8/12

TO55 Adak LTM 2012 9/10/12

0700 - A. Lewis & R. Boyd on site office meeting.
Tailgate Healthy Safety
SSHO - B. Giles
Topics covered:
Wind awareness, vehicle safety
0730 - Mob van for sampling
0800 - Horiba Calibration - PID bump test - 103 ppm

Time	pH	SC ms/cm	Turb NTUs	DO mg/L	Temp °C	Sal %	ORP mV
0800	3.98	4.51	0.0	10.40	12.58	0.2	303
1130	3.94	4.50	0.0	10.51	12.02	0.2	291
1515	3.99	4.52	0.0	10.59	11.58	0.2	284

0820 - A. Lewis & R. Boyd on site
MW-187-1 (SWMU 62) to resample for Benzene. Breathing zone PID: 0.0
0830 - Collect [DTW = 19.02 ft btoc]
set flow rate: 0.5 L/min
0841 - Collect water quality parameters listed on water sampling log.
50°F, overcast.
0857 - Parameters do not stabilize:
Purge 2.0 gal (3x casing volume = 1.59 gal)
pH - 6.26, SC - 0.485 mS/cm, Turb - 1 NTUs,
DO - 0.00 mg/L, Temp - 6.05°C, Sal - 0.0%,
ORP - -63 mV. Clear water, odorless
Robert Boyd 9/10/12

TO55 Adak LTM 2012 9/10/12

0900 - Collect sample MW-187-1-A-2012
- 3-40mL VOC amber vials w/HCl Benzene 8260C.
0920 - A. Lewis & R. Boyd on site
MW-107-1 (SWMU 62 Sandy Cove)
Breathing zone PID: 0.0 ppm.
0930 - Collect [DTW = 18.18 ft btoc]
set flow rate: 0.5 L/min
Allowed well to purge ~1.5 gal prior to connecting to flow cell.
0946 - Collect water quality parameters listed on water sampling log.
51°F, overcast, rain.
0958 - Parameters Stabilize: Purge 3.0 gal,
pH - 6.13, SC - 0.409 mS/cm, Turb - 8 NTUs, DO - 0.00 mg/L,
Temp - 6.15°C, Sal - 0.0%, ORP - -29 mV.
Light yellow color, moderate smell of petroleum. Yellow/orange particulate.
1005 - Collect sample MW-107-1-2012
- 2-1 L amber w/HCl DRO AK 102
1025 - A. Lewis & R. Boyd on site
03-802 (SWMU 62 Sandy Cove)
Breathing zone PID: 0.0 ppm.
1035 - Collect [DTW = 16.54 ft btoc]
set flow rate: 0.5 L/min
Robert Boyd 9/10/12

TOSS Adak LTM 2012 9/10/12

1038 - Collect water quality parameters listed on water sampling log. 51°F, overcast, moderate wind.

1054 - Parameters do not stabilize: Purge 20 gal (3x casing volume = 199 gal) pH - 5.81, SC - 0.168 mS/cm, Turb - 24 NTUs, DO - 5.89 mg/L, Temp - 5.68°C, Sal - 0.0%, ORP - 116 mV. Colorless, odorless water

1100 - Collect sample 03-802-2012
- 2 - 1L amber w/ HCl DRO AK 102

1250 - A. Lewis & R. Boyd on site AMW-704 (SWMU 62 Eagle Bay)
Breathing zone PID: 0.0 ppm

1300 - Collect [DTW = 7.09 ft btoc]
Set flow rate: 0.5L/min
Orange particulate observed at initial, allowed to purge ~1 gal prior to connecting to flow cell 51°F, rain, moderate wind

1312 - Collect water quality parameters listed on purge form

1328 - Parameters stabilize: Purge 30 gal, pH - 5.90, SC - 0.213 mS/cm, Turb - 15 NTUs, DO - 1.40 mg/L, Temp - 8.15°C, Sal - 0.0%,

Robert Boyd 9/10/12

TOSS Adak LTM 2012 9/10/12

1328 cont...
ORP - 96 mV. Clear water with some orange particulate, odorless.

1335 - Collect Sample AMW-704-2012
- 2 - 1L amber w/ HCl DRO AK 102.

1340 - Complete Monitoring Well Gauging Visual Inspection Checklist.
- [DTW = 7.09 ft btoc]
- DTB = 16.59 ft btoc (Hard bottom)
- Light surface rust on monument

1400 - A. Lewis & R. Boyd on site HMW-146-3 (SWMU 62 Sandy Cove)
Breathing zone PID: 0.0 ppm, wellhead: 2.9 ppm

1410 - Collect [DTW = 16.20 ft btoc]
Set flow rate: 0.5L/min

1413 - Collect water quality parameters listed on water sampling log. 49°F, moderate wind, heavy rain

1425 - Parameters stabilize: Purge 1.5 gal, pH - 6.24, SC - 0.352 mS/cm, Turb - 9 NTUs, DO - 0.00 mg/L, Temp - 6.11°C, Sal - 0.0%, ORP - 46 mV. Clear odorless water.

1435 - Collect sample HMW-146-3-2012
- 2 - 1L amber w/ HCl DRO AK 102

Robert Boyd 9/10/12

TO55 Adak LTM 2012 9/10/12

1500 - On site office to de-mob sample van. Store samples overnight, restock van, QC paperwork, & download photos

1530 - SWMU 62 Sandy Cove Photo Log

Date	Time	Description
9/8/12	0947	03-155_facing S
9/8/12	1115	03-619_location top view

SWMU 62 Eagle Bay Photo Log

Date	Time	Description
9/10/12	1350	AMW-704_facing W

1900 - End of day.

Robert Bard 9/10/12

TO55 Adak LTM 2012 9/10/12 RB 9/11/12

0700 - On site office meeting
Tailgate Health & Safety
SSHO - B Giles
topics covered:
wind awareness & safety,
low pH.

0730 - Mob van for sampling

0755 - Horiba Calibration

Time	pH	SC ms/cm	Turb NTUs	DO mg/L	Temp °C	Sal ‰	ORP mV
0755	3.98	4.52	0.0	10.51	11.54	0.2	263
1300	3.98	4.52	0.0	10.73	11.55	0.2	262
1645	3.99	4.53	0.0	11.28	11.58	0.2	259

PID bump test: 102 ppm

0820 - On site at Fuels

0900 - A. Lewis & R. Bard on site
03-103 (SWMU 62 Eagle Bay)
Breathing zone PID 0.0 ppm, wellhead = 0.3 ppm

0910 - Collect [DTW = 16.02 ft btoc]
Set flow rate: 0.5 L/min

0920 - Collect water quality parameters listed on ~~purge~~ RB 9/11/12 water sampling log. 48°F, moderate wind.

0932 - Parameters stabilize: Purge 1.5 gal, pH 5.87, SC - 0.177 mS/cm, Turb - 5 NTUs.

Robert Bard 9/11/12

TO55 Adak LTM 2012 9/11/12

0932 cont...
DO - 5.02 mg/L, Temp - 5.78°C, Sal - 0.0%,
ORP - 209 mV. Clear odorless water.
0940 - Collect sample 03-103-2012
• 2-1L amber w/HCl DRO AK102
0955 - A. Lewis & R. Boyd on site
03-109 (SWMU 62 Eagle Bay)
Breathing zone PID: 0.0 ppm
1020 - Collect [DTW = 30.04 ft btoc]
Set flow rate: 0.4 L/min
1024 - Collect water quality parameters listed on water sampling log. 48°F, moderate wind.
1044 - Parameters stabilize: Purge 20 gal,
pH - 6.15, SC - 0.277 mS/cm, Turb - 7 NTUs,
DO - 9.30 mg/L, Temp - 5.74°C, Sal - 0.0%,
ORP - 199 mV. Clear odorless water.
1050 - Collect sample 03-109-2012 (MS/MSD)
• 6-1L amber w/HCl DRO AK102
Large air bubbles seen throughout purge.
1130 - A. Lewis & R. Boyd on site
RW-303-13 (SWMU 62 Eagle Bay)
Breathing zone PID: 0.0 ppm
well head - 0.4 ppm.

Robert Boyd 9/11/12

TO55 Adak LTM 2012 9/11/12

1140 - Collect [DTW = 6.82 ft btoc]
Set flow rate: 0.5 L/min
Fine black particulate observed at initial, allowed to purge 1/2 gallon prior to connecting to flow cell.
1149 - Collect water quality parameters listed on water sampling log. 48°F, light wind
1201 - Parameters stabilize: Purge 20 gal,
pH - 6.03, SC - 0.185 mS/cm, Turb - 0.0 NTUs,
DO - 4.07 mg/L, Temp - 9.72°C, Sal - 0.0%,
ORP - 183 mV. Clear odorless water.
1210 - Collect sample RW-303-13-2012
• 2-1L amber w/HCl DRO AK102
1415 - A. Lewis & R. Boyd on site
NL-09 (SWMU 62 Eagle Bay).
1420 - Collect surface water quality parameters listed on water sampling log. 50°F, light wind, mist.
1425 - Collect sample NL-09-2012
• 3-40mL VOC amber vial w/HCl GRO AK101
• 3-40mL VOC amber vial w/HCl BTEX 8260C
• 2-1L amber w/HCl DRO AK102

Robert Boyd 9/11/12

TO55 Adak LTM 2012 9/11/12

1425 cont...

- 2-1L amber u/p PAHs 8270D SIM

1420 - Late Entry

NL-09 water quality parameters: pH-6.21, SC-0.519 mS/cm, Turb-7 NTUs, DO-8.11 mg/L, Temp-9.81°C, Sal-0.0%, ORP-35 mV. Moderate smell of petroleum

1430 - Surface Water Sampling Visual Inspection Checklist Complete.

- Light sheen observed when accessing surface water location
- Approx. 75 ft upstream inside boom sections black staining along shoreline (3ft x 100ft)
- Black oil seeping inside boom section along shoreline ~100ft up stream from sample location.

1435 - A. Lewis & R. Boyd on site NL-09S (SWMU 62 Eagle Bay)

1445 - Collect sample NL-09S-2012

- 2-4oz tared amber w/ 25 mL surrogated MEOH GRO AK 101
- 2-4oz. tared amber w/ 25mL non-surrogated MEOH BTEX 8260C

Robert Boyd 9/11/12

TO55 Adak LTM 2012 9/11/12

1445 cont...

- 2-8oz amber u/p DRO AK 102 & PAHs 8270D SIM

1500 - Complete Sediment Sampling Visual Inspection Checklist.

- Dark grey sand with light organic matter (grass roots).
- Moderate smell of petroleum, approx 75ft downstream of three boom sections/locations.
- No color change after sediment was disturbed, but light sheening was observed.

1600 - A. Lewis & R. Boyd on site at bunker to transfer SWMU 62 purge water to drum and dispose of PPE & tubing to dedicated drums.

1630 - On site office to de-mob van, store samples for overnight storage, COC paperwork, & download photos.

1730 - SWMU62 Photo Log Eagle Bay

Time	Description
1436	NL-09 - facing W

Robert Boyd 9/11/12

T055 AdaK LTM 2012 9/11/12

1730 cont...

SWMU 62 Photo Log Eagle Bay

Time	Description
1459	NL-09S_facing W
1459	NL-09S_location top view
1518	NL-09_0.1Seep ~100ft upstream
1518	NL-09_0.1Seep ~100ft upstream_2
1518	NL-09_0.1Seep ~100ft upstream_3
1523	NL-09_location reference_facing NW
1523	NL-09_location reference_2_facing

1900 - End of day

Robert Bird 9/11/12

T055 AdaK LTM 2012 9/12/12

0800 - On site office meeting
Tailgate Health & Safety
SSHO - B. Giles
Topics covered:
Proper PPE, acid awareness, hantavirus.

0950 - A. Lewis & R. Byrd on site NL-09 (SWMU 62 Eagle Bay) to collect GRO & Dry Weight sample.

1000 - Collect sample NL-09SA-2012
- 2-4oz. tared amber w/ 25 mL surrogated MeOH GRO AK 101
- 2-4oz. amber u/p Dry Weight

1400 - Former Power Plant East Canal Photo Log

Time	Description
1019	East Canal Seep_Shoreline Inspection Boom 9.12 facing N
1019	" "_2
1019	" "_3
1020	East Canal Seep_Shoreline Inspection Boom 9,12 Top view
1020	East Canal Seep_Shoreline Inspection Boom 9,12_ waterfowl prints

Robert Bird 9/12/12

TO55 Adak LTM 2012 9/12/12

1400 cont...

Former Power Plant East Canal Photo Log

Time	Description
1020	East Canal Seep - Shoreline Inspection Boom 9,12 facing S.
1020	East Canal Seep - Shoreline Inspection Boom 9,12 facing NW
1024	East Canal Seep - Shoreline Inspection Boom 11 facing SE
1024	" " - 2
1024	East Canal Seep - Shoreline Inspection Boom 9,12 facing N - 4
1024	East Canal Seep - Shoreline Inspection between Boom 11 and Boom 9,12 facing E
1028	East Canal Seep - Shoreline Inspection Boom 11 facing S
1030	East Canal Seep - Shoreline Inspection Boom 11 Top view
1030	East Canal Seep - Shoreline Inspection Boom 11 facing NE
1039	East Canal Seep - Shoreline Inspection submerged Drum near NL-08 facing W

1430 South of Runway 18-36 Photo Log

Time	Description
1053	NL-08 Erosion facing SE

Robert Bred 9/12/12

TO55 Adak LTM 2012 9/12/12

1430 cont...

South of Runway 18-36 Photo Log

Time	Description
1053	NL-08 Erosion facing SE - 2
1053	NL-08 Erosion facing NE

1600 - On site office to QC paperwork, de-mob sample van, store samples for overnight storage.

1900 - End of day.

Robert Bred 9/12/12

TOSS Adak LTM 2012 9/13/12

0900 - QC paperwork, photos, against master road map.

1200 - De-mob office & QC garage. De-mob equipment and supplies for shipment via Alaska Airlines

1400 - Prepare & pack samples for shipment to CAS.

1430 - On site Alaska Airlines to ship samples, equipment, and unused sample bottles.

1515 - Personnel de-mob.

1700 - On Site Alaska Airlines to drop-off S. Wunderlich, B. Kercher, B Giles, & B. Balmer.

Relinquished 9/13/12

TOSS Adak LTM 2012 9/14/12

0800 - Continue office de-mob. Continue supply & equipment de-mob.

1700 - End of day

Relinquished 9/14/12

T055 Adak LTM 2012 9/15/12

0800 - On site office meeting
Continue de-mob. Pack equipment for shipment to TRS. RB 9/15/12
Complete Adak LTM 2012 supply inventory.
Organize 167C gel packs
Relocate Team 1 & Team 3 Vans to 167 A & B, respectively.
Organize office and 111A storage closet
Complete 111A garage de-mob. Pack acacer packers for Gold Streak / Gold Rush.
1700 - End of day.

Returned 9/15/12

T055 Adak LTM 2012 9/16/12

0900 - Continue de-mob & packing.
1300 - On site Alaska Airlines to ship equipment to TRS in Dallas, TX. AW# 81685214 and ~~samples~~ supplies RB 9/16/12 to Port Orchard WA. AW# 8168-6592
1530 - Meet w/ AKi to close out housing units.
1600 - Meet w/ Muggs to discuss Team #2 Van status. Its running. J. Highstone will take over care of Van
1715 - On site Alaska Airlines to depart Adak.

Returned 9/16/12


12-19-12
NO FURTHER FOTIES

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ADAK TOSS 2012

TEAM 2

START: 8/16/12

END: 9/11/12

Book 2 - Team 2

Project - Adak LTM 2012

Contract #N44255-09-D-4005

Project # TO55 (Task Order #: 12 79-12)

Navy Installation = former Naval Complex, Adak, AK

Site Name = OU A

Start Date = 8/16/12

End Date = 9/11/12

Book Assignment = Team 2

Brian Giles

Dan Balmer

Company = Sealaska Environmental Services

Address: 18743 Front St. NE fl. 2

Poulsbo, WA 98370

Phone: 360.930.3300

Reviewed by: Chuck Joy TOM

Review Date: 12-19-12

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	PID ION PHOTOCHECK+ 10.6/PC-PLUS 10.6 EV	
	#1111979 (TRS ENVIRONMENTAL)	
	#10-01411 (ION SCIENCE)	
	INTERFACE PROBE SOLINST 122	
	#1134859 (TRS ENVIRONMENTAL)	
	#61623 (SOLINST)	
	PERISTALTIC PUMP PEGASUS 900-1826	
	#1132518 (TRS ENVIRONMENTAL)	
	Horiba U-22 Water Quality Monitor	
	#1116186 (TRS Env. No.)	

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ALL-WEATHER WRITING PAPER

ALASKA MARITIME NWR ADAK, ALASKA

ALL-WEATHER
JOURNAL
FIELD BOOK

Name SEALASKA ENVIRONMENTAL SERVICES

Address 18743 FRONT STREET N.E. FL2
POULSBO, WA 98370

Phone 360 930-3300

Project ADAK LTM 2012
CONTRACT #: N44255-09-D-4005
PROJECT #: TO 55
NAVY INSTALLATION: FORMER NAVAL COMPLEX, ADAK, AK

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TO 55 ADAK LTM 2012 8/16/12

SITE PREP

~~0800~~ STORE GLASSWARE, INTERFACE
2000 PROBES, HORIBAS, PIDS, PERI-
STALTIC PUMPS IN GARAGE.
PLACE PIDS ON CHARGE.

17 AUGUST 2012

0900 8/17/12 CALIBRATE PIDS. ONE
UNIT ARRIVED SANS CHARGE
UNIT BUT WILL NOT ACCEPT A
CHARGE FROM BORROWED UNIT.
CALIBRATE HORIBAS. ALL ARRIVED
WITH 7/8 CHARGE. CHARGE THE
JUMPSTART/COMPRESSOR UNIT;
ARRIVED AT 97%, FINISHED AT
100%. OLD UNIT STILL OPERATIONAL
BUT WILL NOT CHARGE TO FULL
CAPACITY.
1700 FINISH EQUIP PREP. NEED OUTLET
STRIP.

18 AUGUST 2012

1530 PICK UP COOLERS AND GLASSWARE
AT AIRPORT AND STORE IN
GARAGE AT 111B.

20 AUGUST 2012

0700 BEGIN OIL CHANGES ON ADAK

Brian L Gleason 8/24/12

TO 55 ADAK LTM 2012 8/20/12 CONT.

SITE PREP

VEHICLES, CHECK BRAKES, TRANS
FLUID, COOLANT. ALL VEHICLES
HAVE LESS THAN 400 TOTAL MILES
SINCE PREVIOUS MAINTENANCE, BUT
MANY HOURS IDLING.
1530 FLEET HQ MAINTENANCE ON
ALL 3 VANS AND F-150. AIRED
OUT BUNKER.
1830 FINISH REVIEW OF APP/SSHP W/ FOL

21 AUGUST 2012

0800 REMOVE OVERPACK FROM 3E
BOXES WITH 6 1-LITER PRESERVED
AMBERS EACH.
ALLOW SPARE PID TO DISCHARGE
TO SEE IF IT WILL ACCEPT A
CHARGE.

22 AUGUST 2012

0800 BRIAN MOVE FROM 111B TO 167C.
0945 MEET WITH JOHN AT BUNKER TO BURN
BOOM AND SERVICE GENERATORS.
SEVERE CORROSION FROM CONDENSATION
RUN GENERATORS (4) PLUS HONDA
FOR 1/2 HOUR EACH. CHANGE OIL

Brian L Gleason 8/22/12

TO 55 ADAK LTM 2012 CONT.

SITE PREP

GENERATOR START RIGHT UP. DID NOT REPLACE SPARK PLUGS NEED TO BUY 13/16 PLUG WRENCH. POSSIBLE SOLUTION FOR CORROSION IS APPLICATION OF AIRTIGHT BAGS WITH DESSICANTS. RE-MAINTAINCE 'CLEAN' BUNKER. TEAM 2 VAN, WITH GOOD BATTERY, WILL NOT START, TRACE POSSIBLE PROBLEM TO A RELAY. ORDER NEW SPARE RELAY. PULL RELAY AND CHECK CONNECTORS FOR CORROSION; REPLACE RELAY AND VAN STARTS.

23 AUGUST 2012

0800 (SAFETY MTG FOR TO 56)

TO DUMP TO GET RID OF OVERPACK BOXES.

24 AUGUST 2012

0900 SAFETY AND WORK PLAN MTG. PRESENT WERE ANDY LEWIS, SHERRI WUNDERLICH, BOB BOYD, JOHN HIGHSTONE, DON PALMER, BRIAN GILES. VISITED ADAK COMM. CTR. AND HAD TECH (BIG MIKE) 'REGISTER' PHONE. THIS WAS DONE BY

Brian L Giles 8/24/12

2 TO 55 ADAK LTM 2012 CONT.

SITE PREP

TURNING PHONE OFF AND ON AGAIN WITHIN VIEW OF CELL TOWER. CELL TOWER ON WHITE ALICE IS PROBLEMATIC AT THIS TIME. ALSO TALKED TO CITY PERSONNEL ABOUT TSUNAMI WARNING SIREN SCHEDULED 1X PER MONTH; HE SAID THEY 'JUST GOT TOO BUSY' BUT WOULD 'CONTACT EVERYONE' AND SCHEDULE A DRILL FOR SEPT. THE WARNING SIGNAL DOES ARRIVE AT ADAK COMM. CTR. AND WOULD BE USED IF A TSUNAMI ALERT WAS RECIEVED. SSHO WILL ALSO RECIEVE THIS WARNING BY EMAIL WHICH NOW IS OPERATIVE ON CELL PHONE. TOURED ISLAND ROADS TO FAMILIARIZE AND ALSO INTRODUCE BOB B. TO TSUNAMI EVACUATION SITE AT BERING HILL. REQUIRED COMMONLY USED ADAK ROADS TOWED INOPERATIVE VAN TO CITY SHOP FOR WORK.

1600 INITIAL TROUBLESHOOTING POINTS TO DEFECTIVE IGNITON SWITCH.

Brian L Giles 8/24/12

TO 55 ADAK LTM 2012
25 AUGUST 2012

0900 SAFETY MEETING, REVIEW COMM., WINDS, PPE. REVIEW WP AND QC. INVENTORY COOLERS, QC TRIP BLANKS, STAGE COOLERS AND BOTTLES FOR SAMPLES.

1215 TO BUNKER TO TAKE DOWN DRT BOOMS, HANG WET BOOM. RE-ARRANGE BOOM PALLETS, CLEAN FLOOR

1510 EQUIP/CLEAN VANS, INSTALL TABLE, PURGE BARREL, FIRE EXTINGUISHER, SUPPLIES.

Brk L. Giles 8/26/12

Aug 27, 2012 Adak LTM 2012
Mon. TO 55

0700 H&S Meeting and field orientation.
Organize sample bottles.
Initial Equip calibration

Horiba U-22 — Replacement Horiba 1109045/1109657

Std	0820	1340	1345	1745
pH 4	3.99	3.99	3.99	3.99
Cond 4.99	4.50	4.51	4.50	4.49
Turbi 0.0	0.0	0.0	0.0	0.0
DO mg/l	10.39	10.17	10.31	9.91
Temp °C	15.12	13.65	14.47	14.46
Sal. %	0.2	0.2	0.2	0.2
ORP mV	254	243	325	243

0830 Calibrate PID
Bump test 0.0 ambient, 99 ppm calibrate
Load bottles & field equip.

0910 Arrive South of Runway 18/36
Arrive Well 02-231
conduct hazard & physical survey

0914 Photo of well view north
PID - 0.2 ppm in well head
0.0 in breathing zone

0920 DTW: 14.59' tc. No product/sheen
Insert tubing to 16.6' tc.

Don Balmer 8/27/12

Aug 27, 2012 — Adak LTM 2012

Mon. — TO 55

0950 Begin purging at 0.3g/4min.
Parameters did not stabilize.

1024 Collect Sample 02-231-2012
(3) 40 ml vials w/HCl BTEX 8260C
(2) 1-L amber glass w/HCl - DRO AK102
(2) 1-L amber glass - PAHs 8270D SIM

1034 Collect Dup Sample 02-241-2012
(3) 40 ml vials w/HCl BTEX 8260C
(2) 1-L amber glass w/HCl - DRO AK102

Final Field Parameters:
Purge vol. 1.98g, Time 1022, pH 6.07,
Cond. 0.950, Turb. 12.4, DO 0.00,
Temp 6.67°, Sal. 0.0, ORP -149.

1054 DTB - 18.55 ft. soft
Pack samples - dispose of water to ground.

1130 Move to Well 02-232
conduct hazard & physical survey
~~Photo of well~~ DKB
PID - 0.0 ppm - both readings

1142 DTW - 17.40' tc. No product/sheen
Insert tubing to 21.0 ft tc
Begin purging at 0.25g/5min.

Don Balmer
8/27/12

Aug 27, 2012 — Adak LTM 2012

Mon. — TO 55

1535 Collect Sample 02-232-2012
(3) 40-ml vials w/HCl - BTEX 8260C
(2) 1-L amber glass - PAHs 8270D SIM

1220 Interrupt purging due to Horiba malfunction - continuous 0.999 S.Cond.

1230 - lunch - 1330
Recalibrate Horiba - Exchange w/ backup unit. #1109045

1355 Return to well 02-232
continue purging w/ new Horiba.
Meter indicates same problem w/ S.Cond

1425 Borrow Team 1's Horiba to test well.
Also indicates S Cond at 0.999.
Return to Backup Horiba to continue purging well. Confer w/ Sherri.

1510 Replace w/ Team 3 Horiba. Indicates a valid S.Cond. Also no bubbles in water now.

1535 Parameters stabilized - collect sample
Final Field Parameters:
Purge vol. Time 1531, pH 6.26,
S.Cond. 0.514, Turb. 62.5, DO 0.00,
Temp 6.45, Sal. 0.0, ORP -102

1550 DTB - 24.74'

1557 Photo of well southwest

Don Balmer 8/27/12

Insert DKB

Aug 27, 2012 — Adak LTM 2012

Mon — TO 55

Pack samples & dispose water to ground.

1600 Move to Well AS-1

1603 Photo of well view North
conduct hazard & physical survey.

1620 PID - 0.0 ppm - both zones

1622 DTW 13.71 ft. tc Insert tube to 27.0'
Begin purging at 0.5 q per 5 min.
Parameters stabilize.

1705 Collect Sample AS-1-2012
w/ MS/MSD for PAHs
(3) 40 ml vials w/HCl - BTEX 8260C
(6) 1-L amber glass - PAHs 8270D SIM
Final Field Parameters:
Purge vol. 2.5 q. Time 1703, pH 6.26,
S.Cond. 0.666, Turb. 33.7, DO 0.00,
Temp 7.04, Sal. 0.0, ORP -102.

1730 DTB - 29.25'
Pack samples & dispose of water to ground.
Return samples to storage garage

1830 Return to base

Don Balmer

8/27/12

Aug 28, 2012 — Adak LTM 2012

Tues — TO 55

0700 Its's Meeting and field orientation.

0745 Arrive SA 79 for Shoreline Inspection
Start at South End opposite Well 602

Time	View	photos
~~0800~~ 0754	W	well 602
0754	NW	beach oblique
		several old rusty pipes (pieces)
		metal debris,
		On rocks - kelp, barnacles, bluemussels
0801	NW	beach oblique
		metal grid rebar in concrete,
0804	NW	
0807	NW	nr well 02-230
0807	NW	N. end of SA 79
		No evidence of any seeps, or
		any visible contamination

0820 Lower end of South Runway 18/36 Inspection

Time	View	photos
0824	NW	healthy rock vegetation
		to first pipe crossing
0829	NW	between pipe crossing &
		lower bridge
		metal debris, concrete, rebar
0832	NW	at basin 6

Don Balmer 8/28/12

Aug 28, 2012 — Adak LTM 2012
Tues — TO 55

Time	View - photo	
0838	NW	Minor iron staining nr. north end of culvert (boom 7) minor clear seep on shore.
0840	N	dead baby salmon nr. seep
0842	NW	from beneath lower bridge
0843	NE	to upper bridge
0848	N	to upper bridge

few minor seeps along bank, no obvious sign of contamination.

0854 Start SUMV 60 Shoreline Inspection at lower pipeline crossing

Time	View - photo	
0854	NW	at boom 6 rebar, metal debris, concrete
0858	Down	Dead flounder on beach below lower bridge
0900	Down	Dead salmon in creek
0901	NW	Stream from beneath lower bridge
0903	W	to Boom 10
0905	SW	Culvert stream @ Boom 10 - iron staining
0906	Down	Minor seep w/ HC staining above boom

Don Balmer 8/28/12

Aug 28, 2012 — Adak LTM 2012
Tues — TO 55

Time	View	photo
0908	SW	Petroleum seep in bank - behind boom
0909	NE	
0911	W	Major seep from culvert - clear no staining
0913	N	N. end of inspection.
0916	S	Overview of 2 culverts + boom 10

Continue South Runway 18/36 Survey at Upper bridge

Time	View - photo	
0922	E	Oil coated rock on bank - approx 4' x 2'
0925	NE	from beneath upper bridge
0927	N	N of bridge - minor iron staining on sediment
0929	Down	Minor sheen in footprint & along shoreline
0934	Down	Black sediment beneath surface does not sheen in water
0938	N	beach - oblique
0946	N	to bulkhead + metal debris
0949	N	from bulkhead

Don Balmer 8/28/12

Aug 28, 2012 Adak LTM 2012
Tues. TO 55

Time View - photo

0955 Dam - Disturbed sediment is black & creates sheen

0955 N Canal Discharge pipes - not flowing
More black stained seal w/ sheen

0959 N to Old trestle
minor seeps from rocks - no staining or sheen.

1010 At N. end of inspection
Meet w/ John (Team 5) to coord. NMCB well inspections.

1035 Arrive well 02-479
conduct hazard & physical survey.

1036 Photo of well view SW
PID - 0.0 both zones

1045 DTW - 12.97 ft tc. No product
DTB - 19.50 ft tc.

1048 Well NMCB-12
Conduct hazard & physical survey

1049 Photo of well view South
PID 1.4 in well, 0.0 breathing zone

1052 DTW - 14.54' tc No product
DTB 20.40' tc.

Dan Balmer 8/28/12

Aug 28, 2012 Adak 2012 LTM
Tues. TO 55

1054 Well 02-815
conduct hazard & physical survey

1056 Photo of well - S view
PID - 2.0 in well, 0.0 in breathing zone

1100 DTW - 14.31' DTP 14.26' 0.05' product
DTB 19.69'

1105 Well NMCB-11
conduct hazard & physical survey

1108 Photo of well - view E
PID - 9.3 ppm in well, 0.0 in breathing zone

1110 DTW - 9.88' DTP - 9.87' Product 0.01'
DTB - 18.77'

1115 Well 02-300
conduct hazard & physical survey

1118 Photo of well - view
PID - 67.3 ppm in well 0.0 in zone

1125 DTW - 10.94' DTP - 10.25' Thickness 0.69'
DTB 12.55'

1128 Well 02-816
conduct hazard & physical survey

1130 Photo - view South
PID 0.0 both zones

1135 DTW - 11.00 ft tc No product.
DTB - 17.31 ft tc

Dan Balmer 8/28/12

Aug 28, 2012 Adak LTM 2012

Tues TO 55

1137 Well 02-478

conduct hazard & physical survey

1138 Photo -

PID 0.0 ppm - both zones.

DTW - 8.20' tc No product

DTB - 13.65'

1145 Well 02-455

conduct hazard & physical survey

1149 Photo - South

PID 0.1 ppm in well 0.0 in breathing zone

DTW - 12.40' tc No product.

DTB - 17.90'

1155 Well NMCB-09

conduct hazard & physical survey

1157 Photo - view West

PID 0.0 ppm both zones.

1202 DTW - 10.09' tc. No product

DTB - 18.57' tc

1205 Well NMCB-10

conduct physical & hazard survey,

1205 Photo - to south west

PID 344 ppm in well, 0.1 ppm in breath zone

1214 DTW - 11.39' DTP - 11.18' 0.21' Thickness,

DTB - 17.02'

Don Balmer 8/28/12

Aug 28, 2012 Adak LTM 2012

Tues TO 55

1214 Well 02-463

conduct physical & hazard survey

1215 Photo -

PID 0.1 ppm in well, 0.0 in breath. zone.

1220 DTW - 10.12 ft tc No product

DTB - 15.18 ft.

1230 - lunch - 1330

1330 - paperwork & photo documentation

Don Balmer

8/28/12

Aug 29, 2012 Adak LTM 2012
Wed. TO 55

0700 H&S meeting & field orientation
0730 Calibrate PID
Bump 0.0 ambient, 102ppm calibrate
0745 Arrive NMCB (west end) for
Shoreline Inspection

Time	View - photo	
0758	E	
0758	S	
0810	E	cobble embayment
0813	NE	culvert pipe 18in dripping
0822	E	
0822	S	
0837	E	
0837	S	shoreline
0838	N	to building to locate
0843	EN	to building end
0843	E	to wooden bulkhead
0843	S	shoreline
0847	SE	discharge pipe -12in - no Q
0852	N	to building
"	E	
"	S - down wooden bulkhead	
0856	E	
"	S	

Don Balmer 8/29/12

Aug 29, 2012 Adak LTM 2012
Wed. TO 55

Time	View - photo
0905	W
"	NW
"	E
0914	NE to gravel beach

0930 End of survey at well 02-479
No observed seeps and no visual sign of petroleum contamination or stressed organisms.
0940 Discuss sed. sampling site w/ Sherri & John
Organize Sample bottles
1035 Arrive NMCB Well 02-478
Initial Equip. calibration
Horiba U-22

Std	1045	1645
PH 4	3.99	3.99
Cond 4.49	4.50	4.51
Turb 0.0	0.0	0.0
DO mg/l	11.06	10.54
Temp °C	11.07	13.07
Sal. %	0.2	0.2
ORP mV	267	250

DO

conduct hazard & physical survey
PID 0.0 both zones

Don Balmer 8/29/12

Aug 29, 2012 — Adak LTM 2012

Wed. — TO 55

DTW - 7.94' tc. No product

Insert tube to 10.7 ft tc.

1100 Begin purging at 0.5g/5 min.

Parameters stabilized

1130 [Collect Sample 02-478-2012]

(2) 40 ml vials w/ HCl - GRO AK101

(3) 40 ml vials w/ HCl - Benzene 8260C

(2) 1-L amber glass w/ HCl - DRO AK102

Final Field Parameters:

Purge vol: 2.0g, Time 1125, pH 6.15,

Cond. 0.683, Turb. 32.2, DO 0.00,

Temp 7.28°, Sal 0.0, ORP -104

1145 Pack samples & dispose of water to ground.

1200 - Lunch - 1300

1300 Well NMCB-12

PID - 0.0 ppm both zones

1309 DTW - 14.50' tc. No product

Insert tubing to 17.45' tc

1312 Begin purging at 0.5g/4 min.

Parameters stabilized

1335 [Collect Sample NMCB-12-2012]

(3) 40 ml vials w/ HCl - GRO AK101

(3) 40 ml vials w/ HCl - Benzene

(2) 1-L amber glass w/ HCl - DRO

Don Balmer 8/29/12

Aug 29, 2012 — Adak LTM 2012

Wed. — TO 55

Final Field Parameters:

Purge Vol: 2.0g, Time 1334, pH 6.54

Cond. 0.620, Turb. 13.9, DO 0.00,

Temp 7.00, Sal. 0.0, ORP -72

Pack samples & dispose of water to ground.

1400 Well NMCB-11

PID 1.4 in well 0.0 breathing

1410 DTW 9.61 tc Product - Trace

Insert tubing to 14.4'

1415 Begin purging at 0.5g/4 min

Parameters stabilized

1445 [Collect Sample NMCB-11-2012]

w/ MS/MSD for GRO, Benzene

(9) 40 ml vials w/ HCl - GRO AK101

(9) 40 ml vials w/ HCl - Benzene 8260C

(2) 1-L amber glass w/ HCl - DRO AK102

Final Field Parameters:

Purge vol. 3.0 g. Time 1444, pH 6.53,

Cond. 8.32, Turb 0.0, DO 0.00

Temp. 7.29, Sal. 0.4, ORP -65

Pack samples & dispose of water to ground

1525 Well 02-455

PID - 0.0 both zones

1534 DTW - 12.10' tc. No product

Don Balmer 8/29/12

Aug 29, 2012 Adak LTM 2012
Wed TO 55

Insert tubing to 15.0' tc

1540 Begin purging at 0.5g/4 min
Parameters did not stabilize.

1610 Collect Sample 02-455-2012
(3) 40 ml vials w/HCl GRO AK101
(3) 40-ml vials w/HCl Benzene 8260C
(2) ~~ORO~~ 1-L amber glass w/HCl DRO AK102

Find Field Parameters:
Purge vol. 3.0g. Time 1610, pH 6.59
Cond. 19.7, Turb 14.6, DO 0.06,
Temp 8.24, Sal. 1.1, ORP -22

Pack samples & dispose of water to ground.

1640 Return to base
calibrate meter & repack samples.

1750 Back to Apt.

Don Balmer

8/29/12

Aug 30, 2012 Adak LTM 2012
Thurs. TO 55

0700 H&S Meeting & field orientation
Initial Equip calibration
Horiba U-22

Std.	0750	1120
pH 4	4.00	3.99
Cond 4.49	4.54	4.52
Turb 0.0	0.0	0.0
DO mg/l	11.06	11.32
Temp °C	9.75	9.70
Sal %	0.2	0.2
ORP mV	258	227

DTG

0810 PID Bump test 0.0 ambient, 102 ppm
0815 Arrive SWMU 14 Well 01-153
conduct physical & hazard survey
0817 Photo of well view North
PID 0.0 ppm both zones
0825 DTW - 18.46 ft tc. No product
Insert tubing to 22.7' tc.
0840 Begin purging at 0.5g/4 min.
Parameters did not stabilize
0910 Collect Sample 01-153-2012
w/ MS/MSD for VOCs
(9) 40 ml vials w/HCl - PCE +daughters

Don Balmer
8/30/12

Aug 30, 2012 Adak LTM 2012

Thurs. TO 55

Final Field Parameters:

Purge Vol. 3.0g Time 0909, pH 6.22,
Cond 0.253, Turb 47.1, DO 4.16,
Temp 5.70°, Sal. 0.0, ORP 55.
DTB - 27.19' soft.

0925 Pack samples + containerize purge water
0930 Well MW14-5
0929 Photo of well view North
conduct hazard & physical survey
PID - 0.0 both zones
0940 DTW - 15.87' tc No product
Insert tubing to 19.94' tc.
0950 Begin purging at 0.5g/4 min
Parameters stabilized.
1025 Collect Sample MW14-5-2012
w/ MS/MSD
(3) 40 ml vials w/ HCl - GRO - AK101
(2) 1-L amber glass w/ HCl - DRO - AK102
(3) 500 ml Poly w HNO_3 - T. Pb
(3) 500 ml Poly w HNO_3 - Diss Pb - Filtered
1035 Collect Sample MW24-5-2012 dup.
(1) 500 ml poly w HNO_3 - T. Pb
(1) 500 ml poly w HNO_3 - Diss. Pb - Filtered
Final Field Parameters:
Purge vol. 3.0g Time 1021, pH 6.21,

Don Balmer 8/30/12

Aug 30, 2012 Adak LTM 2012

Thurs. TO 55

Cond. 0.234, Turb. 0.0, DO 0.00,
Temp. 5.77, Sal. 0.0, ORP 5
DTB - 23.99'

1100 Pack samples & containerize water
Drop at Garage
1135 Well MW15-3
conduct hazard & physical survey
1136 Photos of Well Down & South view
PID - 0.0ppm both zones
1140 DTW - 13.81' tc no product
DTB - 21.57' tc
1145 Well MW15-424
conduct hazard & physical survey
1149 Photo of Well view North
PID - 0.0 both zones
1155 DTW - 18.40' tc No product
DTB - 26.39' tc
1200 - lunch - 1300
1300 - Pack samples for shipment on
today's flight to 1500
1800 water level data paperwork

Don Balmer

8/30/12

Aug 31, 2012 — Arctic LTM 2012

Fri — TO55

0700 H&S Meeting & field orientation
Organize bottles. Aaron Vernitratten
Initial Equip calibration
Horiba

Std.	0750	1250	1640
pH 4	4.00	4.00	3.99
cond 4.49	4.53	4.52	4.51
Turb 0.0	0.0	0.0	0.0
DO mg/l	10.96	10.56	10.51
Temp °c	11.35	12.29	12.47
Sal %	0.2	0.2	0.2
ORP mV	264	231	272

PID Bump test 0.0 ambient, 100 ppm cal.

0835 Arrive SA 78 Clam Lagoon
0840 Well MW-117
conduct hazard & physical survey
0838 Photo view E
PID 0.0 ppm both zones
0845 DTW 14.25' tc No product
DTB 20.62' tc
0850 Well 12-801
conduct hazard & physical survey
0857 Photo view NE
PID 0.0 ppm both zones

Don Balmer 8/31/12

Aug 31, 2012 — Arctic LTM 2012

Fri. — TO 55

0900 DTW - 3.22' tc No product
DTB - 15.59'
0905 Begin SA 78 Shoreline Inspection
Time View - photo start at point of otter sign
0908 SE NE starting point
" S
" W
0915 S
0926 S
0928 NW biogenic sheen, small
" "
0930 S at SW end point No evidence of contamination
Attempt to locate well 12-802 not yet.
1010 Well MW-116
conduct hazard & physical survey
Photo of well
PID 0.0 ppm both zones
1030 DTW 14.19' tc No product
Insert tubing to 18.2' tc
1035 Begin purging at 0.5 g / 4 min
Parameters did not stabalize.
1115 Collect Sample MW-116-2012
(2) 1-L amber glass w/ HCl - DRO

Don Balmer
8/31/12

Aug 31, 2012 Adak LTM 2012 -
Fri TO 55

Final Field Parameters:
Purge vol. 4.0 Time 1113 pH 5.16
Cond. 0.275 Turb. 13.6 DO 2.67
Temp 5.85 Sal. 0.0 ORP 296
DTB - 22.16' tc

1125 pack samples & dispose of water to ground.
1130 Well 12-145
conduct hazard & physical survey
1129 Photo of well view N
PID 19.2 ppm in well, 0.0 breathing
1140 DTW - 24.49' tc No product
Insert tubing to 27.6' tc.
1150 Begin purging at 0.5 g/5 min
Parameters did not stabilize.
1230 Collect Sample 12-145-2012
(3) 40 ml vials of HCl - GRO AK101
(3) 40 ml vials of HCl - Benzene 8260C
(2) 1-L amber-glass of HCl - DRO AK102
Final Field Parameters:
Purge vol. 3.0 g Time 1226 pH 6.28
Cond 0.342, Turb. 50.6, DO 0.00
Temp. 7.78 Sal. 0.0 ORP -48
DTB - 30.62' tc
1330 - lunch - 1415

Don Balmer 8/31/12

Aug 31, 2012 Adak LTM 2012
Fri TO 55

1500 Arrive back at SA 78
1520 Finally locate well 12-802
conduct hazard & physical survey
1521 Photos of well | located ~10' NE of Exc. Warning sign
PID 0.0 ppm both zones
1530 DTW 2.84' tc No product
Insert tubing to 7.5' tc
1535 Begin purging at 0.5 g/5 min.
Parameters stabilized
1615 Collect Sample 12-802-2012
(3) 40 ml vials of HCl - GRO AK101
(3) 40 ml vials of HCl - Benzene 8260C
(2) 1-L amberglass - DRO AK102
Final Field Parameters:
Purge Vol. 3.0 g Time 1612 pH 6.27
Cond. 0.406 Turb. 0.0 DO 0.00
Temp 8.56 Sal 0.0 ORP 194
DTB - 10.39' tc
1635 Pack samples & dispose of water to ground.
1700 Return to garage to unload samples.

Don Balmer

8/31/12

Sept 1, 2012 Adak LTM 2012
Sat TO55

0700 H&S Meeting & field orientation
Organize bottles
Initial equip. calibration
Horiba

Std	0805	1220	1610
pH 4	3.99	3.99	3.99
Cond 4.49	4.52	4.51	4.52
Turb 0.0	0.0	0.0	0.0
DO mg/l	10.37	10.45	10.56
Temp C	13.17	12.16	11.24
Sal %	0.2	0.2	0.2
ORP mV	265	232	189

PID test- 0.0 ambient 101 ppm calibrate.

0900 Arrive SWMU 61

0920 Well 14-210
conduct hazard & physical survey
Photo view S
PID 0.0 both zones

0930 DTW - 2.34' tc No product
Insert tubing to 6.5' tc

0935 Begin purging at 0.25 g/5 min
Parameters did not stabilize

1100 Collect Sample 14-210-2012
(3) 40 mL vials w/HCl - GRO AK101

Don Bulmer 9/1/12

Sept 1, 2012 Adak LTM 2012
Sat TO55

(3) 40 mL vials w/HCl - BTEX 8260C
Final Field Parameters:
Purge vol. 1.25g Time 1047 pH 6.40
Cond. 0.362 Turb 2.6 DO 5.29
Temp 9.15 Sal. 0.0 ORP -46
DTB - 7.49' tc / water disposed to ground.
conduct hazard & physical survey at:

1110 Well TFB-MW4B
Photo
PID - 0.0 both zones

1115 DTW - 4.62' tc no product
Insert tubing to 23.0' tc

1118 Begin purging at 0.25 g/5 min
Parameters stabilized.

1142 Collect Sample TFB-MW4B-2012
(3) 40 mL vials w/HCl - GRO AK101
(3) 40 mL vials w/HCl - BTEX 8260C
Final Field Parameters:
Purge vol. 0.75g Time 1141 pH 6.39
Cond. 0.392 Turb. 0.0 DO 0.00
Temp. 7.63 Sal 0.0 ORP -30
DTB - 29.75' / water disposed to ground.

1200 Return to base & pack samples
1220 - lunch 1320

Don Bulmer 9/1/12

Sept. 1, 2012 Adak LTM 2012

Sat. TO 55

1340 Arrive Former Power Plant T-1451

1345 Well 01-150

conduct hazard & physical survey

Photo view West

PID 0.0 ppm

1400 DTW 20.04' tc No product

Insert tubing to 23.5' tc

1410 Begin purging at 0.5g/5 min

Parameters stabilized

1435 Collect Sample 01-150-2012

w/ MS/MSD

(6) 1-L amber glass w/ HCl - DRO AK102

Final Field Parameters:

Purge vol. 2.0 Time 1433 pH 6.12

Cond. 0.484 Turb. 28.7 DO 0.00

Temp 6.95 Sal. 0.0 ORP 4

DTB - 27.05' tc

pack samples & dispose water to ground

1510 Well 01-118

conduct hazard & physical survey

Photo

PID, 0.0 ppm both zones

1520 DTW - 16.62' tc No product

Set intake at - 23.0 ft TC

1530 Begin purging at 0.5g/5 min

Don Balmer 9/1/12

Sept. 1, 2012 Adak LTM 2012

Sat. TO 55

Parameters stabilized

1550 Collect Sample 01-118-2012

(3) 1-L amber glass w/ HCl DRO AK102

Final Field Parameters:

Purge Vol. 1.5g Time 1547 pH 6.29

Cond 0.650 Turb 106. DO 0.00

Temp 6.48 Sal. 0.0 ORP -60

DTB - 29.46' tc

1600 pack samples & dispose of water to ground

1630 Return to base.

Don Balmer

9/1/12

Sept 3, 2012 Adak LTM 2012

Mon. - Labor Day TO 55

0700 H&S Meeting / field orientation
organize bottles
Initial equip calibration
Horiba

Std.	0745	1515
pH 4	4.00	3.99
Cond 4.49	4.55	4.51
Turb 0.0	0.0	0.0
DO	11.49	10.27
Temp °C	9.15	13.03
Sal %	0.2	0.2
ORP mV	264	231

DKB

PID - 0.0 ppm ambient, 100 ppm calibrate
weather - Rain, strong wind.

0800 Arrive at GCI Compound

0815 Well 04-204
conduct hazard / physical survey
Photo view North
PID 485 ppm in well 0.0 ambient

0830 DTW 25.68' no product
DTB 33.04'

0840 Well 04-201
conduct hazard / physical survey
Photo view NE / NE

Don Balmer 9/3/12

Sept 3, 2012 Adak LTM 2012

Mon TO 55

PID 125 ppm in well,

0845 DTW 25.63' Trace product
DTB 32.31'

0855 Well 04-202
conduct hazard / physical survey
Photo view East
PID 331 ppm in well 0.0 ambient

0900 DTW - 25.77' 25.76 DTP = 0.01'
DTB - 33.43'

0910 Well 04-203
conduct hazard / physical survey
Photo of well -
PID 124 ppm in well 0.0 ambient

0912 DTW 26.27' No product
DTB 33.31'

0915 Well 04-211
conduct hazard / physical survey
Photo - view North
PID 165 ppm

0925 DTW 23.75' No product
DTP 30.26

0935 Well 04-213
conduct hazard / physical survey
Photo - view West

Don Balmer 9/3/12

Sept. 3, 2012 Adak LTM 2012
Main TO 55

PID - 468 ppm in well

0940 DTW - 23.76' No product
DTB 29.92'

0950 Well 04-100
conduct hazard & physical survey
Photo
PID 531 ppm in well / 0.0 ambient

1050 DTW 28.11 tc No product
DTB 34.58'

1052 Well 04-210
conduct hazard & physical survey
Photo view E
PID 10.5 ppm in well 0.0 ambient

1055 DTW 24.72 No product
DTB 32.91'

1105 Well 04-701
conduct hazard & physical survey
Photo view E
PID 0.0 in well 0.0 ambient

1110 DTW - 14.13' tc No product
DTB - 21.30' tc soft

1135 - lunch - 1230

Don Balmer

9/3/12

Sept. 3, 2012 Adak LTM 2012
Main TO 55

1300 Well 04-701
Insert tubing to 17.5' tc

1310 Begin purging at 0.5g/4min
Parameters did not stabilize.

1350 Collect Sample 04-701-2012
(3) 40 ml vials of HCl - GRO AK101
Final Field Parameters:
Purge vol. 3.5g Time 1348 pH 6.39
Cond. 0.297 Turb. 32.5 DO 0.00
Temp 6.58 Sal 0.0 ORP -31

1355 pack samples & dispose of water to ground

1405 Well 04-204
Insert tubing to 29.3' tc
Begin purging at 0.5g/5min
Parameters stabilized

1445 Collect Sample 04-204-2012
(3) 40 ml vials of HCl GRO AK101
(2) 1-Lamber glass of HCl DRO AK102
Final Field Parameters:
Purge vol. 2.0g Time 1444 pH 6.44
Cond. 0.223 Turb 39.6 DO 0.00
Temp 6.56 Sal 0.0 ORP -17

1500 pack samples & dispose of water to ground

1530 Return to base & unpack equip.

Don Balmer 9/3/12

Sept 4, 2012 — Adak LTM 2012
Tues — TO 55

0700 H&S meeting & field orientation
Initial equip. calibration
Horiba

Std	0755	1200	1630
pH 4	3.99	3.99	4.00
Cond 4.49	4.55	4.52	4.51
Turb 0.0	0.0	0.0	0.0
DO	11.2	11.11	11.68
Temp C	9.51	9.71	11.47
Sal %	0.2	0.2	0.2
ORP mV	265	188	226

0750 Arrive CCI Compound
0750 Well 04-202
weather - Rain, strong winds 35-50mph
Insert tubing to 28.9' tc
0810 Begin purging at 0.5g/5 min
Parameters did not stabilize
0900 Collect Sample 04-202-2012
(3) 40 ml vials w/HCl - GRO AK101
(2) 1-L amber glass w/HCl - DRO AK102
Final Field Parameters:
Purge vol. 4.0g Time 0855 pH 6.22
Cond. 0.248 Turb 77.6 DO 0.66
Temp 6.69 Sal. 0.0 ORP -13

Don Balmer 9/4/12

Sept. 4, 2012 — Adak LTM 2012
Tues — TO 55

0920 pack samples & dispose of w
0945 Well 04-100
Insert tubing to 31.0' tc
1000 Begin purging at 1/3 gal/4 min
Parameters stabilized.
1030 Collect Sample 04-100-2012
(3) 40 ml vials w/HCl - GRO AK101
(2) 1-L amber glass w/HCl - DRO AK102
1040 Collect Sample 04-110-2012 Dup.
(3) 40 ml vials w/HCl - GRO AK101
Final Field Parameters:
Purge vol. 1.98g Time 1030 pH 6.36
Cond. 0.301 Turb 45.1 DO 0.00
Temp 5.81 Sal. 0.0 ORP -34
1050 pack samples & dispose of water to ground
1055 Well 04-210
Insert tubing to 28.8' tc
1110 Begin purging at 0.5g/5 min
Parameters stabilized
1138 Collect Sample 04-210-2012
(3) 40 ml vials w/HCl - GRO AK101
(2) 1-L amber glass w/HCl - DRO AK102
Final Field Parameters
Purge Vol. 2.0 Time 1137 pH 6.35

Don Balmer 9/4/12

Sept 4, 2012 — Adak LTM 2012

Tues. — TO 55

Cond. 0.284 Turb. 7.7 DO. 0.00

Temp. 5.64 Sal. 0.0 ORP -36

1155 pack samples & dispose of water to ground.

1200 - lunch - 1300

1320 Well 04-213

Insert tubing to 26.8' ft

1335 Begin purging to 1/3 g / 4 min.

Parameters stabilized

1425 Collect Sample 04-213-2012

(3) 40 ml vials w/HCl - GRO AK101

(2) 1-L amber glass w/HCl - DRO AK102

Final Field Parameters:

Purge vol. 2.3 l Time 1420 pH 6.25

Cond. 0.246 Turb. 41.6 DO 0.00

Temp 6.41 Sal 0.0 ORP -25

1435 pack samples & dispose of water to ground. paperwork & prepare bottles for SWMU 60.

Don Balmer

9/4/12

Sept. 5, 2012 — Adak LTM 2012

Wed. — TO 55

0700 HS Meeting & field orientation

Initial equip calibration

Horiba

Std	0735	1315	1740
pH 4	4.00	3.88	3.99
Cond 4.49	4.55	4.51	4.56
Turb 0.0	0.0	0.0	0.0
DO mg/l	11.59	11.72	11.40
Temp °C	8.06	10.37	10.72
Sal ‰	0.2	0.2	0.2
ORP mV	261	245	199

PID - 0.0 ambient / 91 ppm calibrate

0800 Arrive SWMU 60 - Tank Farm A

0810 Well MW-E006

conduct hazard & physical survey

Photo

PID 0.0 ppm both zones

0820 DTW - 6.07' ft Re-product

Insert tubing to 13.0 ft to

0828 Begin purging at 0.5 g / 5 min

Parameters stabilized

0920 Collect Sample MW-E006 2012

(3) 40 ml vials w/HCl - Benzene 8260C

Don Balmer

9/5/12

Sept. 5, 2012 Adak LTM 2012
Wed. TO 55

Final Field Parameters:

Purge Vol. 4.5g Time 0917 pH 6.61
Cond. 0.465 Turb. 53.5 DO 0.00
Temp. 6.52 Sal. 0.0 ORP -84

0925 pack samples & dispose of water to ground.
DTB ~ 18.42' tc

0940 Well 653
conduct hazard & physical survey
Photo view NE
PID 1.1 ppm in well / 0.0 ambient

0948 DTW - 10.816' DTP ~~10.50'~~ 10.15' 0.01'T
Insert tubing to 13.8 ft tc

0953 Begin purging at 0.5g/5min.
Parameters stabilized.

1025 Collect Sample 653-2012
(3) 40 ml vials w/HCl - BTEX 8260C
(2) 1-Lamber glass w/HCl - DRO AK102
(2) 1-Lamber glass - PAHs 8270D SIM
Final Field Parameters
Purge Vol 2.5g Time 1023 pH 5.84
Cond. 0.149 Turb. 329 DO 0.00
Temp 9.15 Sal. 0.0 ORP 108
DTB - 12.45' tc

1050 pack samples & containerize water

Don Balmer 9/5/12

Sept. 5, 2012 Adak LTM 2012
Wed. TO 55

1100 Well LC5A
conduct hazard & physical survey
Photo
PID 0.0 ppm both zones

1105 DTW 6.23' tc. No product
Insert tubing to 9.5' tc

1115 Begin purging at ½g/4min
Parameters stabilized

1140 Collect Sample LC5A-2012
(3) ~~BTE~~ 40 ml vials w/HCl - BTEX 8260C
(2) 1-Lamber glass - PAHs 8270D SIM
Final Field Parameters:
Purge Vol. 2.0g Time 1136 pH 6.60
Cond 0.257 Turb 0.0 DO 0.00
Temp 10.42 Sal 0.0 ORP -83
DTB - 12.57' tc.

1150 pack samples & dispose of water to ground.

1200 - lunch 1300

1330 Well 652
conduct hazard & physical survey
Photo
PID 0.3 in well 0.0 ambient

1338 DTW 9.40' tc No product
Insert tubing to 12.2' tc.

Don Balmer 9/5/12

Sept 5, 2012 Adak LTM 2012
Weed. TO 55

1345 Begin purging at 0.5 g/5 min.
Parameters did not stabilize

1422 Collect Sample 652-2012
4 MS/MSD - BTEX
(9) 40 ml vials w/HCl - BTEX 8260C
(2) 1-L amber glass w/HCl - DRO AK102
(2) 1-L amber glass PAHs - 8270D SIM
Final Field Parameters:
Purge vol. 3.0 g Time 1421 pH 6.42
Cond. 0.609 Turb. 60.0 DO 0.00
Temp 7.47 Sal. 0.0 ORP -100
DTB - 15.29' tc

1440 pack samples & dispose of water to ground.

1455 Well 651
conduct hazard & physical survey
Photo
PID 0.0 both zones

1504 DTW 9.11' tc No product
Insert tubing to 12.0' tc

1510 Begin purging at 0.5 g/5 min
Parameters did not stabilize.

1550 Collect Sample 651-2012
(3) 40 ml vials w/HCl - BTEX 8260C
(2) 1-L amber glass w/HCl - DRO AK102

Don Balmer 9/5/12

Sept 5, 2012 Adak LTM 2012
Weed. TO 55

(2) 1-L amber glass PAH - 8270D SIM
Final Field Parameters:
Purge vol. 3.0 g Time 1546 pH 6.27
Cond. 0.300 Turb. 69.0 DO 0.00
Temp 6.66 Sal. 0.0 ORP -39
DTB - 15.29' tc

1605 pack samples & dispose of water to ground.

1620 Well 650
conduct hazard & physical survey
Photo & bentonite around well
PID - 0.0 ppm both zones
DTW - 10.09' tc No product

1630 Insert tubing to 13.2' tc.

1635 Begin purging at 0.5 g/5 min
Parameters did not stabilize.

1715 Collect Sample 650-2012
(3) 40 ml vials w/HCl BTEX - 8260C
(2) 1-L amber glass w/HCl - DRO AK102
(2) 1-L amber glass - PAHs 8270D SIM
Final Field Parameters:
Purge vol. 3.0 Time 1710 pH 6.34
Cond 0.333 Turb. 97.4 DO 0.00
Temp 7.75 Sal. 0.0 ORP -35
DTB - 16.32' tc

1730 pack samples & dispose of water to ground.

1800 End day Don Balmer 9/5/12

Sept. 6, 2012 Adak LTM 2012
Thurs. TO55

0700 HASP Meeting / field orientation
Instrual Equip. calibration
Horiba

Std.	0755	1115
pH 4	4.00	3.99
Cond 4.49	4.54	4.56
Turb 0.0	0.0	0.0
DO mg/l	11.61	11.72
Temp °C	8.24	9.41
Sal. %	0.2	0.2
ORP mV	253	225

DLB

PID - 0.0 ambient / 101 ppm calibrate
Proceed to SWMU 61

0850 Well 14-113
conduct hazard & physical survey
Photo view SE
PID 0.0 ppm both zones

0855 DTW 3.07' tc No product
Insert tubing to 5.2' tc.

0904 Begin purging at 1/3 g/5min
Parameters did not stabilize

0925 Collect Sample 14-113-2012
(3) 40 ml vials w/HCl - GRO AK101
(3) 40 ml vials w/HCl - BTEX 8260C

Don Balmer 9/6/12

Sept. 6, 2012 Adak LTM 2012
Thurs. TO 55

(2) 1-L amber glass - PAHs 8270D SIM
Final Field Parameters:
Purge vol. 0.99g Time 0922 pH 6.55
Cond. 0.533 Turb. 121. DO 5.23
Temp 8.47 Sal. 0.0 ORP -77

0945 DTB 6.31' tc.
dispose of purge water to ground
SWMU 61 Shoreline Inspection

1014 Photo view SE to NL-D-04
1018 " " SE from NL-D-04
102 " view S from NL-04
No evidence of seeps or visible contamination

1050 pack samples & dispose of trash at bunker
1320 - lunch - 1220
Pack coolers for shipment today
1400 - IC Inspection - Roberts Landfill clearance
Paperwork - WP maps.

Don Balmer

9/6/12

Sept. 7, 2013 Adak LTM 2012
Fri. TO 55

0700 H&S Meeting & field orientation
prepare sample bottles
Initial Equip calibration
Hoaba

Std	0800	1120	1610
pH 4	4.00	3.98	3.99
Cond 4.49	4.55	4.54	4.51
Turb 0.0	0.0	0.0	0.0
DO mg/l	11.70	11.73	10.89
Temp °C	8.82	9.74	10.94
Sal %	0.2	0.2	0.2
ORP mV	268	205	188

PID 0.0 ppm ambient / 101 calibrate
Proceed to Tanker Shed

0840 Well 04-601
PID 0.0 both zones
0850 DTW 10.22' tc No product
Insert tubing to 13.8' tc.
0857 Begin purging at 0.5g/5 min
Parameters did not stabilize.
0945 [Collect Sample 04-601-2012]
(3) 40 ml vials w/HCl - GRO AK101
(2) 1-L amber glass w/HCl - DRO AK102

Don Balmer
9/7/12

Sept. 7, 2012 Adak LTM 2012
Fri. TO 55

Note - FAA requests wells TS-01, TS-05 be converted to flush mount - pass to Aaron
Final Field Parameters:
Purge vol. 4.0g Time 0947 pH 6.10
Cond. 0.225 Turb. 110.0 DO 11.03
Temp 7.32 Sal. 0.0 ORP 106

0955 pack samples & dispose of water to ground
1005 Well 04-290
PID - 0.0 ppm both zones
1015 DTW - 6.97' tc. No product
Insert tubing to 10.5' tc.
1020 Begin purging at 0.5g/5 min.
Parameters stabilized
1055 [Collect Sample 04-290-2012]
(3) 40 ml vials w/HCl - GRO AK101
(2) 1-L amber glass w/HCl - DRO AK102
1105 [Collect Sample 04-300-2012] Dup
(2) 1-L amber glass w/HCl - DRO AK102
Final Field Parameters:
Purge vol. 2.5g Time 1052 pH 6.21
Cond. 0.286 Turb. 98.5 DO 0.00
Temp 8.36 Sal. 0.0 ORP -9
1110 pack samples & dispose of water to ground
1130 - lunch - 1230

Don Balmer 9/7/12

Sept. 7, 2012 Adak LTM 2012
Fri TO 55

1215 Well 04-306
PID 0.0 ppm both zones
DTW - 6.88' tc No product
Insert tubing to 10.0' tc
1230 Begin purging at 0.5 g/4 min
Parameters stabilized.
1305 Collect Sample 04-306-2012
(3) 40 ml vials of HCl - GRO AK101
(2) 1-L amber glass of HCl - DRO AK102
1315 Collect Sample 04-316-2012 Dup.
(3) 40 ml vials of HCl - GRO AK101
Final Field Parameters:
Purge vol. 3.5 g Time 1304 pH 5.99
Cond. 0.315 Turb 95.0 DO 0.00
Temp. 8.64 Sal. 0.0 ORP -6
1325 pack samples
1330 Well 04-175
PID - 23.4 in well / 0.0 ambient
DTW - 6.56' tc No product
Insert tubing to 10.5' tc
1350 Begin purging at 0.5 g/5 min.
Parameters stabilized
1420 Collect Sample 04-175-2012
(2) 1-L amber glass - DRO AK102

Don Balmer 9/7/12

Sept. 7, 2012 Adak LTM 2012
Fr. TO 55

Final Field Parameters:
Purge vol. 2.0 Time 1415 pH 6.17
Cond. 0.326 Turb 91.5 DO 0.00
Temp 8.94 Sal. 0.0 ORP -37
1430 pack samples & dispose of water to ground.
Proceed to South of Runway
1500 Well 02-232 to resample PAHs
PID - 0.0 ppm both zones
1515 DTW - 16.33' tc No product
Insert tubing to 20.5' tc.
1522 Begin purging at 0.5 g/5 min.
Parameters stabilized
1545 Collect Sample 02-232R-2012
(2) 1-L amber glass - PAHs 8270D SIM
Final Field Parameters:
Purge vol. 1.5 g Time 1541 pH 6.45
Cond. 0.805 Turb 0.0 DO 0.00
Temp 6.89 Sal. 0.0 ORP -108
1550 pack samples & dispose of water to ground.
1620 Return to base.
Paperwork

Don Balmer 9/7/12

Sept. 8, 2012 — Adak LTM 2012
Sat. — TO 55

0700 H&S meeting & field orientation
organize sample bottles
Initial Equip. calibration
Horiba

Std	0735	1100	1520
pH 4	3.99	3.99	3.98
Cond 4.49	4.54	4.53	4.52
Turb. 0.0	0.0	0.0	0.0
DO mg/l	11.28	11.05	11.17
Temp °C	9.85	10.45	11.19
Sal %	0.2	0.2	0.2
ORP mV	250	173	183

PID - 0.0 ppm ambient / 100. calibrate.
Proceed to South of Runway
0815 Well AS-1 to resample PAHs
PID 0.0 both zones
0830 DTW - 13.59' tc. No product.
Insert tubing to 27.0' tc
0835 Begin purging at 0.5 g / 5 min
Parameters stabilized
0905 Collect Sample AS-1R-2012
w/ MS/MSD
(6) 1-L amber glass - PAHs 8270D SIM

Don Balmer
9/8/12

Sept. 8, 2012 — Adak LTM 2012
Sat. — TO 55

Final Field Parameters:
Purge vol. 2.0 g Time 0900 pH 6.38
Cond. 0.662 Turb. 60.3 DO 0.00
Temp 6.36 Sal. 0.0 ORP -107
0925 pack samples & dispose of water to ground
0935 Well 02-231 to resample PAHs
PID 2.7 ppm in well / 0.0 breathing zone
DTW 14.30' tc No product
Insert tubing to 16.5' tc
0950 Begin purging at 0.5 g / 5 min
Parameters did not stabilize.
1025 Collect Sample 02-231R-2012
(2) 1-L amber glass - PAHs 8270D SIM
Final Field Parameters:
Purge vol. 2.5 Time 1020 pH 6.68
Cond. 0.538 Turb 46.0 DO 0.00
Temp 6.58 Sal. 0.0 ORP -56
1030 pack samples & dispose of water to ground
unload samples at garage
1115 - lunch 1215
Proceed to SWMU 62 Sandy Cove
1255 Well MRP-MW2
Photo view E
PID - 16.7 ppm in well 0.0 breathing

Don Balmer 9/8/12

Sept 8, 2012 Adak LTM 2012

Sat. TO 55

1305 DTW - 21.33' tc No product

Insert tubing to 23.1' tc.

1312 Begin purging at 1/3 g/4 min

Parameters did not stabilize

1350 Collect Sample MRP-MW2-2012

(3) 40 ml vials w/HCl GRO-AK101

(3) 40 ml vials w/HCl BTEX 8260C

(2) 1L amber glass w/HCl DRO AK102

Final Field Parameters:

Purge vol 2.3 g Time 1347 pH 6.10

Cond 0.462 Turb 9.4 DO 0.00

Temp 6.50 Sal 0.0 ORP -24

pack samples & dispose of water to ground

1405 Well MRP-MW3-

DTW 7.66' tc No product

Insert tubing to 9.1' tc

1418 Begin purging at 1/3 g/4 min.

Parameters stabilized

1445 Collect Sample MRP-MW3-2012

(3) 40 ml vials w/HCl GRO AK101

(3) 40 ml vials w/HCl BTEX 8260C

(2) 1L amber glass w/HCl DRO AK102

Final Field Parameters:

Purge vol. 1.65 g Time 1443 pH 6.17

Dan Balmer 9/8/12

Sept. 8, 2012 Adak LTM 2012

Sat. TO 55

Cond. 0.313 Turb. 0.0 DO 0.00

Temp 8.47 Sal. 0.0 ORP -22

1500 pack samples & discharge water to ground.

paperwork & water table maps.

Dan Balmer

9/8/12

Sept. 10, 2012 Adak LTM 2012
Mon. TO 55

0700 H&S Meeting & field orientation
Initial Equip calibration
Horiba

Std	0735	1330	1710
pH 4	3.97	3.99	4.00
Cond 4.49	4.55	4.51	4.54
Turb. 0.0	0.0	0.0	0.0
DO mg/l	11.38	11.54	11.72
Temp °C	8.66	8.50	9.27
Sal %	0.2	0.2	0.2
ORP mV	258	158	166

PID - 0.0 ambient/ 100 ppm calibrate
Proceed to SWMU 62 Sandy Cove
0815 Well 03-895
PID 0.0 both zones
0820 DTW - 21.52' tc.
Insert tubing to 24.6' tc
0830 Begin purging at 0.5g/5min
Parameters did not stabilized due Anelly
0905 Collect Sample 03-895-2012
w/ MS/MSD - GRO
(9) 40 ml vials of HCl - GRO AK101
(3) 40 ml vials of HCl - BTEX 8260C
(2) 1-L amberglass of HCl - DRO AK102

Don Balmer 9/10/12

Sept. 10, 2012 Adak LTM 2012
Mon. TO 55

Final Field Parameters:
Purge vol. 3.0g Time 0904 pH 5.28
Cond. 0.146 Turb. 7.6 DO 5.87
Temp 4.50 Sal. 0.0 ORP 311
0920 ← pack samples & dispose of water to ground.
0930 Well 03-778
PID 0.0 ppm both zones
0942 DTW - 19.50 No product
Insert tubing to 23.5' tc
0955 Begin purging at 0.5g/5 min
Parameters stabilized.
1030 Collect Sample 03-778-2012
w/ MS/MSD - GRO
(9) 40 ml vials of HCl - GRO AK101
(3) 40 ml vials of HCl - BTEX 8260C
(2) 1-L amberglass of HCl - DRO AK102
Final Field Parameters:
Purge vol. 2.5g Time 1025 pH 6.36
Cond. 0.437 Turb. 9.6 DO 0.00
Temp 5.58 Sal. 0.0 ORP -44
1045 pack samples & dispose of water to ground
1130 - lunch - 1230
1235 Well 03-104
PID - 0.0 ppm both zones
1240 DTW - 19.45' tc No product

Don Balmer 9/10/12

Sept. 10, 2012 — Adak LTM 2012

Mon. — TO 55

Insert tubing to 22.0' tc.

1250 Begin purging at 0.5g/5 min

Parameters stabilized

1320 **Collect Sample 03-167-2012**

(3) 40 ml vials of HCl - GRO AK101

(3) 40 ml vials of HCl - BTEX 8260C

(2) 1-L amberglass of HCl - DRO AK102

Final Field Parameters:

Purge vol. 2.0g Time 1315 pH 6.14

Cond. 0.410 Turb 0.0 DO 0.00

Temp 6.45 Sal. 0.0 ORP 6

1330 pack samples & dispose of water to ground

Proceed to SWMU 62 Eagle Bay

1345 Well RW 303-14

PID 0.0 both zones

1350 DTW 7.96' tc No product

Insert tubing to 13.7' tc

1355 Begin purging at 0.5g/5 min

Parameters stabilized (finally)

1535 **Collect Sample RW-303-14-2012**

(2) 1-L amberglass of HCl - DRO AK102

Final Field Parameters:

Purge vol. Time 1550 pH 5.96

Cond 0.164 Turb 9.9 DO 0.48

Don Balmer 9/10/12

Sept. 10, 2012 — Adak LTM 2012

Mon. — TO 55

Temp 7.44 Sal. 0.0 ORP 61

1600 pack samples & dispose of water to ground

Return to Sandy Cove

1610 Well MW-146-1

PID 0.0 both zones

1620 DTW 17.09' tc No product

Insert tubing to 18.3' tc

1630 Begin purging at 1/3 g/4 min.

Parameters stabilized.

1650 **Collect Sample MW-146-1-2012**

(2) 1-L amberglass of HCl DRO AK102

Final Field Parameters:

Purge vol. 1.0 Time 1649 pH 5.99

Cond. 0.416 Turb 0.0 DO 0.00

Temp 7.64 Sal. 0.0 ORP 13

1700 pack samples & dispose of water to ground.

1715 Return to base.

Paperwork

Don Balmer

9/10/12

Sept. 11, 2012 — Adak LTM 2012

Tues. — TO 55

0700 H&S Meeting / Field orientation
organize bottles

Initial Equip calibration

Horiba

Std	0730	1345	1570
pH 4	3.98	3.99	4.00
Cond. 4.49	4.55	4.55	4.52
Turb 0.0	0.0	0.0	0.0
DO mg/l	11.74	11.57	11.26
Temp °C	8.09	9.43	10.00
Sal %	0.2	0.2	0.2
ORP mV	253	158	238

PID - 0.0 ppm ambient / 99 ppm calibrate

Proceed to SWMU 62 Eagle Bay

0830 Well 03-502
PID - 0.0 both zones

0835 DTW - 24.48 tc No product
Insert tubing to 25.4' tc

0850 Begin purging at 0.125 g/5 min.
Parameters did not stabilize

0910 Collect Sample 03-502-2012
(3) 40 ml vials w/ HCl - GRO AK101
(3) 40 ml vials w/ HCl - BTEX 8260C
(2) 1-L amber glass w/ HCl - DRO AK102

Don Balmer 9/11/12

Sept 11, 2012 — Adak LTM 2012

Tues — TO 55

Final Field Parameters:

Purge vol. 0.125 g Time 0905 pH 6.04
Cond 0.251 Turb. 0.0 DO 0.00
Temp 6.19 Sal 0.0 ORP 51

0935 pack samples & dispose of water to ground.
Well RW-303-16
PID 5.8 ppm in well / 0.0 in breathing

0955 DTW 7.90' tc Trace product
Insert tubing to 12.7' tc.

1010 Begin purging to 0.5 g/5 min
Parameters stabilized.

1120 Collect Sample RW-303-16-2012
(2) 1-L amber glass w/ HCl - DRO AK102

Final Field Parameters

Purge vol. 6.5 g Time 1119 pH 5.98
Cond. 0.203 Turb. 0.0 DO 0.00
Temp 7.12 Sal. 0.0 ORP 9

1130 pack samples & dispose of water to ground.

1145 - lunch - 1240

1250 Well MW-303-7
PID - 0.0 ppm both zones

1300 DTW - 21.71' tc No product
Insert tubing to 27.6' tc

1308 Begin purging at 0.5 g/5 min.
Parameters stabilized.

Don Balmer 9/11/12

Sept 11, 2012 Adak LTM 2012

Tues TO 55

1330 Collect Sample MW-303-7-2012

(2) 1-L amberglass +/HCl DRO AK102

Final Field Parameters:

Purge vol. 1.5g Time 1327 pH 6.10

Cond. 0.428 Turb. 5.1 DO 0.00

Temp 7.13 Sal. 0.0 ORP -29

1340 packs samples & dispose of water to ground

1355 Well 03-898

PID 0.0 ppm both zones

1400 DTW - 12.99' toc

Insert tubing to 17.0' toc

1410 Begin purging at 0.5g/5min.

Parameters stabilized.

1450 Collect Sample 03-898-2012

(2) 1-L amberglass +/HCl - DRO AK102

Final Field Parameters:

Purge vol. 3.5g Time 1448 pH 5.97

Cond. 0.187 Turb. 0.0 DO 2.07

Temp 6.90 Sal. 0.0 ORP 172

1500 pack samples & dispose of water to ground.

1515 East Canal Shoreline Inspection

Start at S end at culverts

or new well MW-5 area.

Don Balmer

9/11/12

Sept 11, 2012 Adak LTM 2012

Tues TO 55

Time	View - Photo	
1516	N	S end from culverts
	SW	to culverts
		iron staining on bottom sediments algae growth along shoreline
	N	
	N	small fish & water fowl
		orange floc in water
	N	thick grasses
	N	to NL09 location
	N	to Boom 3
	NW	sheen behind Boom 3
	N	Boom 8 w sheen & blackened shore sand + veg.
	NW	product behind Boom 8
	N	
	W	sheen & Boom 2
	N	at N end

1545 End survey

1550 Well RW-303-14

photo - view W

DTB - 18.80 toc very soft

1600 Unload samples.

Paperwork - 1730.

Don Balmer

9/11/12

Rite in the Rain®
ALL-WEATHER
JOURNAL
№ 390N

ADAK TOSS 2012 LTM

TEAM 3

Start: 8/25/12

End: 9/13/12

BOOK # 3 - TEAM 3

PROJECT - ADAK LTM 2012

CONTRACT # - N44255-09-D-4005

~~PROJECT~~ TASK ORDER # - T055

NAVY INSTALLATION - FORMER NAVAL COMPLEX, ADAK, AK

SITE NAME - OUA

START DATE - 8-24-12

END DATE - 9/13/12

BOOK ASSIGNMENT - TEAM 3

JOHN HIGHSTONE

Beth Kercher

COMPANY - SEALASKA ENVIROMENTAL SERVICES

ADDRESS - 18743 FRONT ST. NE, FL 2

POULSBO, WA 98370

PHONE - 360-930-3300

REVIEWED BY: [signature] TOM

DATE REVIEWED: 12-19-12

PID: ION SCIENCE PHOCHECK

SERIAL # 10-0412

ASSET # 1111981

MULTIMETER: HORIBA

PERISTALTIC PUMP:

} N/A NOT USED

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14-15	SABU	9/1/12
16	SWMU 61	9/5/12
16	SA BU	9/5/12
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ALL-WEATHER WRITING PAPER

ALL-WEATHER
JOURNAL
FIELD BOOK

Name TEAM 3
JOHN HIGHSTONE, BETH POOLE KERCHER

Address

Phone

Project TOSS ADAK LTM 2012

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T055 ADAK LTM 2012 8.25.12

0900 HEALTH + SAFETY PPP LEVEL D

1130 - AT BUNKER FOR LTM MAINTENANCE AND PREP BUNKER AREA, [redacted] 8.25.12

TOWED TEAM #2 VAN TO SHOP FOR REPAIRS, PREPARE VEHICLES FOR WELL WORK ON MONDAY. INSPECT AND CHECK TEAM 3 SAMPLING EQUIPMENT.

1500 - END OF DAY

John A Ghostlaw 8.25.12

T055 ADAK LTM 2012 8.27.12

TEAM 3 - JOHN HEGHSTONE

0700 - HEALTH + SAFETY MEETING - PPE LEVEL D

0815 - PID CALIBRATION COMPLETE - 99.2 ppm

0915 - AT SOUTH OF RUNWAY 18-36 FOR WELL INSPECTIONS

HAZARD INSPECTION COMPLETE

WELL - 02-518 PID = 0.0 AT WELL HEAD
DTW - 6.46 DTB - 11.03 - NO PRODUCT

WELL - E-209 PID = 0.0 AT WELL HEAD
DTW - 6.63 DTB - 15.65 REMOVED SOCK <.01 SHEEN

WELL Z3-6 PID = 0.0 AT WELL HEAD
DTW 7.68 DTB - 10.71 NO PRODUCT

WELL RW-18136-05 PID = 0.0 AT WELL HEAD
DTW 9.36 DTB - 19.48 NO PRODUCT

WELL E-213 PID = 0.0 AT WELL HEAD
DTW 11.28 DTB - 18.10 NO PRODUCT

WELL Z4-2 PID = 0.0 AT WELL HEAD
DTW 12.62 DTB - 14.49 NO PRODUCT

WELL E-217 PID = 0.0 AT WELL HEAD
DTW 15.62 DTB - 22.38 NO PRODUCT

WELL Z3-2 PID = 0.0 AT WELL HEAD
DTW 10.29 DTB - 12.46 REMOVED SOCK NO PRODUCT

WELL E-207 PID = 0.0 AT WELL HEAD
DTW 10.04 DTB - 17.54 REMOVED SOCK NO PRODUCT

WELL RW-18136-02 PID = 0.0 AT WELL HEAD
DTW 4.21 DTB - 20.04 NO PRODUCT

WELL RW-18136-04 PID = 0.0 AT WELL HEAD

John A Ghostlaw 8.27.12

T055 ADAK LTM 2012 8-27-12

[DTW 3.83] DTB - 27.16 .06 PRODUCT
WELL E-216 PID = 0.1 AT WELL HEAD
[DTW 16.87] DTB - 22.75 REMOVED SOCK .43 PRODUCT
WELL 18|36-02 PID = 0.0 AT WELL HEAD
[DTW 17.79] DTB - 24.05 NO PRODUCT
1630 AT UNIT FOR PAPERWORK

PHOTO LOG - TODAY ONLY, TIME STAMP 1 HOUR OFF.

TIME	WELL NUMBER	DIRETION
0835	02-518	EAST
0910	E-209	NORTH
0933	23-6	SOUTH
0946	RW-18|36-05	WEST
1003	E-213	WEST
1019	24-2	NORTH
1041	E-217	NORTH
1222	23-2	EAST
1240	E-207	NORTH
1302	RW-18|36-02	NORTH
1427	RW-18|36-04	NORTH
1453	E-216	SOUTH
1506	18|36-02	SOUTH
1515	SOUTH OF RUNWAY 18-36 OVER VEIN	NORTH

1900 - END OF DAY

John Aughstun 8.27.12

T055 ADAK LTM 2012 8-28-12

0700 - HEALTH + SAFETY PPE LEVEL D
0740 - PID CALIBRATION COMPLETE - 96.6
0810 - AT [NMCB] FOR WELL INSPECTIONS
HAZARD INSPECTION COMPLETE

WELL-NMCB-04 PID - 0.0 AT WELL HEAD
[DTW 12.33'] DTB - 18.48' NO PRODUCT
WELL-02-301 PID - 0.0 AT WELL HEAD
[DTW 12.67'] DTB - 19.53' NO PRODUCT
WELL-E-201 PID - 0.0 AT WELLHEAD
[DTW 13.55'] DTB - 18.87' NO PRODUCT
WELL-02-452 PID - 0.0 AT WELLHEAD
[DTW 9.68'] DTB - 20.10' NO PRODUCT
WELL-02-817 PID - 0.0 AT WELLHEAD
[DTW 10.33'] DTB - 17.15' NO PRODUCT
WELL-02-461 PID - 0.0 AT WELLHEAD
[DTW 7.13'] DTB - 14.32' NO PRODUCT
WELL-02-819 PID - 0.0 AT WELLHEAD
[DTW 7.67'] DTB - 14.54' NO PRODUCT
WELL-02-451 PID - 0.0 AT WELLHEAD
[DTW 9.25'] DTB - 21.12' NO PRODUCT
WELL-02-818 PID - 2.3 AT WELLHEAD
[DTW 9.66'] DTB - 16.62' SHEEN, REMOVED SOCK
WELL-NMCB-07 PID - 9.2 AT WELLHEAD
[DTW 10.53'] DTB - 19.21' REMOVED 2 SOCKS .37 PRODUCT
WELL-02-453 PID - 0.0 AT WELLHEAD

John Aughstun 8-28-12

TO55 ADAK LTM 2012 8.28.12

[DTW 9.58'] DTB - 15.08' NO PRODUCT
WELL-02-497 PID - 4.2 AT WELLHEAD
[DTW 7.41'] DTB - 10.67' REMOVED SOCK .08 PRODUCT
WELL-NMCB-08 PID - 0.0' AT WELLHEAD
[DTW 9.65'] DTB - 15.70' NO PRODUCT
WELL-NMCB-05 PID - 0.0 AT WELLHEAD
[DTW 4.95'] DTB - 10.81' NO PRODUCT
1450 AT UNIT FOR PAPERWORK

PHOTO LOG

TIME	WELL	DIRECTION
0835	NMCB-04	SOUTH
0854	02-301	WEST
0902	E-201	NORTH
0924	02-452	WEST
0943	02-817	EAST
1004	02-461	EAST
1023	02-819	WEST
1054	02-451	SOUTH
1112	02-818	SOUTH
1132	NMCB-07	EAST
1145	02-453	SOUTH
1202	02-497	EAST
1228	NMCB-08	EAST
1356	NMCB-05	WEST
1423	RW-18/36-02	NORTH

John A Kylak 8.28.12

TO55 ADAK LTM 2012 8.28.12

PHOTO RW-18/36-02 IS A RETAKE DUE TO PREVIOUS PHOTO NOT BEING CLEAR ENOUGH TO ID WELL.

DEMOBE TRUCK, CLEAN AND SANITIZE INTERFACE PROBE, TAKE TRASH AND PPE TO BUNKER.

1900 END OF DAY

John A Kylak 8.28.12

8

T055 ADAK LTM 2012 8.29.12

TEAM 3 - JOHN HIGHSTONE, SHERRI WUNDERLICH

0706 - HEALTH + SAFETY PPE LEVEL D

0745 - PID CALIBRATION COMPLETE - 101 PPM

0825 - AT SUMU58 AND SA 73, HEATING PLANT 6

1000 - AT NMC3 FOR NL05 SEDIMENT SAMPLE NL-055-2012 FOR THE FOLLOWING PERAMETERS

- GR (AK101)(2) x 4oz. GLASS, TARED, AMBER JAR W/ SEPTA + 25 ML SURROGATED METHANOL (SAMPLE AND MS/MSD)
- BENZENE (8260C)(2) x 4 oz GLASS, TARED, AMBER JAR W/ ~~25~~ SEPTA 8.29.12 + 25 ML NON SURROGATED METHANOL (SAMPLE ONLY)
- DRO (AK102)(2) x 4oz GLASS AMBER JARS. (SAMPLE AND MS/MSD)

1030 - TOTAL OF (6) BOTTLES COLLECTED

1400 - BACK AT SUMU58 FOR WELL INSPECTIONS

WELL	DTB	~~DTW~~ 8.29.12 DTW	DTP	NOTES
12-121	17.68'	13.85'	13.84'	.01 PRODUCT *
12-203	19.89'	12.77'	N/A	REMOVED SOCK NO PRODUCT
12-124	21.28'	13.13'	N/A	NO PRODUCT
12-125	18.93'	10.93	N/A	NO PRODUCT
12-105	18.92'	10.78	N/A	NO PRODUCT
12-106	20.63'	10.54'	N/A	NO PRODUCT
12-114	17.90'	10.01'	N/A	NO PRODUCT
12-611	15.96'	4.08'	N/A	NO PRODUCT

John A Highstone 8.29.12

9

T055 ADAK LTM 2012 8.29.12

WELL	DTB	DTW	DTP	NOTES
12-601	16.09'	4.40'	N/A	NO PRODUCT
12-610	16.66'	16.35'	N/A	NO PRODUCT
12-604	12.78'	10.90'	N/A	NO PRODUCT

ALL PID READINGS NOTED ON "MONITORING WELL (GROUND WATER) GAUGING / VISUAL INSPECTION CHECKLIST." FORM.

1615 - AT UNIT FOR DEMOB, PAPERWORK, + PHOTOS.

PHOTO LOG

TIME	WELL	DIRECTION	NOTES
1054	NL-05	#1	
1055	NL-05	#2	
1111	NL-05	#3	MARKED FOR FUTURE REFERENCE
1110	NL-05	#4	
1110	NL-05	#5	
1425	12-105	SOUTH	
1435	12-106		BROKE COLLAR
1436	12-106	SOUTH	
1444	12-114		BROKE COLLAR
1445	12-114	SOUTH	
0855	12-121	SOUTH	
1412	12-124	SOUTH	
1417	12-125	SOUTH	
0912	12-203	WEST	
1506	12-601	EAST	

John A Highstone 8.29.12

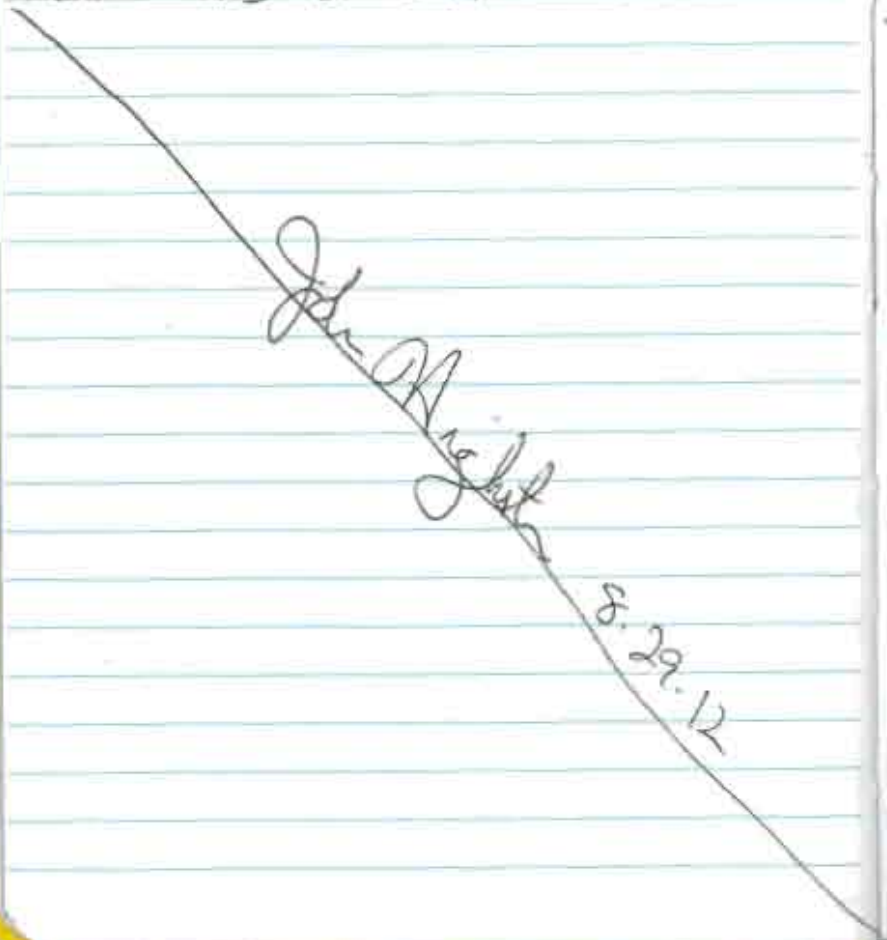
T055 ADAK LTM 2012 8.29.12

~~JH~~ 8.29.12

PHOTO LOG CONT.

TIME	WELL	DIRECTION	NOTES
1529	12-604	WEST	
1517	12-610		BROKEN GLAS
1518	12-610	SOUTHEAST	
1451	12-611	SOUTH	

1900 - END OF DAY



T055 ADAK LTM 2012 8.31.12

0700 - HEALTH & SAFETY, PPE LEVEL D

0755 - PID CALIBRATION COMPLETE - 103 ppm

0815 - AT MECHANIC SHOP TO DROP OFF PARTS FOR VAN.

0835 - AT TANKERSHED FOR INSPECTIONS

HAZARD INSPECTION COMPLETE

WELL	DTB	DTW	DTP	NOTES
04-601	17.83'	10.95	N/A	NO PRODUCT
TS-03	12.71'	6.67'	N/A	NO PRODUCT
04-290	14.72'	7.41'	N/A	NO PRODUCT
TS-04	12.66'	7.11'	N/A	NO PRODUCT
04-317	14.52'	7.20'	N/A	NO PRODUCT
04-309	14.06'	6.92'	N/A	NO PRODUCT
04-307	13.95'	7.21'	N/A	NO PRODUCT
04-304	13.95'	7.03'	N/A	NO PRODUCT
04-306	13.02'	7.31'	N/A	NO PRODUCT
04-176	14.27'	7.11'	N/A	NO PRODUCT
04-302	13 38'	7.32'	N/A	NO PRODUCT
04-310	14.03'	7.02'	N/A	*1 SEE NOTE BELOW
04-308	14.07'	7.25'	N/A	NO PRODUCT
04-312	12.95'	6.93'	N/A	NO PRODUCT
04-311	13.05'	6.64'	N/A	NO PRODUCT
04-314	12.93'	6.94'	N/A	NO PRODUCT
04-175	14.42'	6.96'	N/A	NO PRODUCT
04-128	11.96'	7.02'	N/A	NO PRODUCT
04-313	13.38'	6.97'	N/A	NO PRODUCT

8.31.12

TO55 ADAK LTM 2012 8-31-12

WELL	DTB	DTW	DTP	NOTES
04-303	12.85'	6.83'	N/A	NO PRODUCT
04-301	13.28'	7.06'	N/A	SHEEN < .01

1730 - AT UNIT FOR PAPERWORK, + DEMOBE

ALL PID READINGS NOTED ON "MONITORING WELL (GROUND WATER) VISUAL INSPECTION CHECKLIST"

~~PHOTO LOG~~ SAW 8.31.12 *1 - CONCRETE, METAL CASING, AND LID ALL BROKEN PIECES. DAMAGE POSSIBLY DONE BY METAL SALVAGE CONTRACTOR DOING WORK IN VICINITY OF WELL.

PHOTO LOG

TIME	WELL	DIRECTION	NOTES
	04-601	WEST	
	TS-03	WEST	
0939	04-290	NORTH	
0952	TS-04	WEST	
1013	04-317	NORTH	
1027	04-309	NORTH	
1039	04-307	NORTH	
1052	04-304	WEST	
1109	04-306	EAST	
1143	04-176	NORTH	
1155	04-302	WEST	
1327	04-310		BROKEN MONUMENT
1343	04-310	NORTH	

8.31.12 [signature] 8.31.12

TO55 ADAK LTM 2012 8-31-12

PHOTO LOG CONT.

TIME	WELL	DIRECTION	NOTES
1355	04-308	NORTH	
1410	04-312	WEST	
1432	04-311	NORTH	
1435	04-314	NORTH	
1613	04-175	NORTH	
1623	04-178	NORTH	
1634	04-313	NORTH	
1723	04-303	NORTH	
1723	04-301	WEST	

1900 - END OF DAY

[signature] 8.31.12

TO55 ADAK LTM 2012 9-1-12

0700 - HEALTH + SAFETY - JOHN HIGHSTONE, SHERI WINNESTAEDT
PPE LEVEL D

0820 - HORIBA CALIBRATION

TIME	PH	COND	TURB	DO	TEMP	SAL	ORP
0820	3.99	4.47	0.0	9.94	14.70	0.2	299

1000 - ON SITE AT [SUMM 61, TANK FARM B]
WELL 14-113 - UNABLE TO SAMPLE WELL DUE TO HIGH WATER LEVELS SURROUNDING WELL LOCATION.

1030 - BACK AT UNIT FOR DEMOBE AND PAPERWORK.

1340 - PID CALIBRATION COMPLETE - 103 PPM

1350 - ON SITE AT [SAR0, STEAM PLANT]
HAZARD INSPECTION COMPLETE

WELL	DTB	DTW	DTP	NOTES
04-801	27.85'	21.32'	N/A	NO PRODUCT
04-159	33.44'	23.21'	N/A	NO PRODUCT
04-164	32.17'	21.83'	N/A	NO PRODUCT
SP4-3	28.04'	20.03'	N/A	NO PRODUCT
04-157	22.21'	19.22'	N/A	SHEEN <.01
SP4-2	25.30'	14.34'	N/A	NO PRODUCT

ALL PID READINGS NOTED ON "MONITORING WELL (GROUNDWATER) GAUGING VISUAL INSPECTION CHECKLIST"

PHOTO LOG

TIME	WELL	DIRECTION
1011	14-113	NORTH

John Highstone 9-1-12

TO55 ADAK LTM 2012 9-1-12

PHOTO LOG CONT.

TIME	WELL	DIRECTION
1011	14-113	NORTH
1011	14-113	NORTH
1424	04-801	EAST
1510	04-159	WEST
1522	04-164	SOUTH
1533	SP4-3	EAST
1606	04-157	SOUTH
SP4-2	SP4-2	EAST

1700 - AT UNIT FOR DEMOBE AND PAPERWORK. QC PAPERWORK. PREP FOR MONDAY FEILD WORK

1800 - END OF DAY

John Highstone 9.1.12

16

TO55 ADAK LTM 2012 9.5.12

0700 - HEALTH + SAFETY - PPE LEVEL D

0820 - ON SITE AT SWMU 61 2nd 9.5.12 TO INSPECT WATER LEVELS FOR WELL SAMPLING, SEDIMENT SAMPLING, AND SHORELINE INSPECTION.

0850 - ON SITE AT SA80 FOR RETAKE PHOTOS.

0900 - AT MECHANIC SHOP FOR UPDATE ON VAN REPAIRS.

0915 - END OF DAY

9.5.12

17

TO 55 Adak LTM 2012 9/8/12

0700 Health and Safety - PPE Level D PID Calibration - 105 PPM

0900 Onsite at SWMU 62 Sandy Cove to collect Water levels and well inspections.

Well	DTB	DTW	DTP	Notes
03-104	24.44	19.48	NA	no product
03-778	27.63	19.53	NA	no product
03-802	20.68	16.60	NA	no Product
03-895	27.75	21.54	NA	no product
HMW-1R-1	25.51	19.38	NA	no product
HMW46-1	22.15	16.64	NA	no product
HMW46-3	24.54	16.25	NA	light Sheen
MRP-MW2	24.93	21.38	NA	no product
MRP-MW3	10.62	7.67	NA	no product
MW107-1	29.06	18.22	NA 18.21	thin Sheen 0.01
MW134-10	22.46	17.31	NA	no product
MW134-11	21.56	18.01	NA	no product
MW146-1	19.58	17.12	NA	no product
MW187-1	22.31	19.05	NA	no product
RW102-4	33.32	19.14	NA	no product
—	—	—	—	—

Wells 03-155 and 03-619 were inspected by team 1 during Sampling

— 9/8/12 B. Krecher

9/8/12 TOSS Adak LTM 2012
All PID Readings noted on "Monitoring Well (Groundwater) Gauging Visual Inspection Checklist"

Photo Log

Time	Well	Direction
0904	03-895	South
0923	03-104	North
0932	RW-102-4	West
0938	HMW102-1	Northwest
0951	MRP-MW2	Southeast
"	MRP-MW3	"
1008	03-778	Southwest
1034	HMW-146-3	Northeast
1043	03-802	Northwest
1106	HMW-146-1	West
1119	MW146-1	West
1245	MW107-1	Northeast
~~1255~~ 1301	MW187-1	Northwest
1314	MW134-11	Northwest
1320	MW134-10	North

1345 at Condo for Demob and Paperwork. QC Paperwork.
1500 End of Day

Beth Kercher 9/8/12

TOSS Adak LTM 9/10/12
0700 Health and Safety Meeting Beth Kercher, John Hargstrom
Calibrate PID = 107 ppm
0805 SW MU 6Z ~~Attic~~ 7.0 Sandy Cove, take photo of HMW-146-1
0820 SWMU 6Z Eagle Bay Conduct well inspections and Water levels
1145 Return to Condo for lunch.
1300 SWMU 6Z Eagle Bay well ~~inspections~~
1321 Well 03-518 PID reading of 500 ppm let air out
1359 Well 03-107 PID Reading at 1200 ppm let air out.
1432 Well 03-518 PID Reading 28.0 ppm at well head. 0.4 ppm at Breathing Zone. Collect WL
1444 Well 03-107 PID Reading 18.0 ppm at well head 0.9 at Breathing Zone. Collect WL
1458 Return to Condo for Paperwork

Beth Kercher 9/10/12

9/10/12 TO55 Adak LTM 2012

Well	DTB	DTW	DIP	Notes
03-101	26.88	22.58	NA	No product
03-102	21.26	14.22	NA	No Product
03-103	22.35	16.05	NA	no product
03-107	32.95	27.46	NA	no product
03-109	36.74	30.07	NA	no product
03-502	26.30	24.00	NA	Sheen
03-518	33.95	27.18	NA	no product
03-898	21.37	13.02	NA	Sheen
GTO12-4 MW4	16.73	11.03	NA	Sheen
GTO12-4 MW5	20.15	17.82	NA	no product
HMW303-1	34.25	27.11	NA	no product
HMW303-2	32.13	26.93	NA	no product
HMW303-3	33.22	27.85	NA	no product
HMW303-4	28.63	26.16	NA	no product
HMW303-9	34.48	26.35	NA	no product
HMW303-10	15.28	6.49	NA	no product
HMW303-11	32.05	26.70	26.68	.02
MW303-7	33.53	21.72	NA	No Product
MW303-8	29.23	22.82	NA	no product
MW303-12	31.83	21.45	NA	no product
MW303-14	29.13	22.48	NA	no product
RW303-4	35.83	22.15	NA	no product
RW303-6	37.32	25.53	NA	no product
RW303-7	38.15	22.62	NA	no product

Beth Rercher 9/10/12

TO 55 Adak LTM 9/10/12

Well	DTB	DTW	DIP	Notes
RW303-9	37.73	24.71	NA	Sheen
RW303-13	19.31	6.88	NA	Sheen
RW303-15	34.06	27.67	NA	No product
RW303-16	17.46	7.94	NA	No product

Photo Log

Time	Well	Direction
0805	HMW1461	East
0820	MW303-14	North
0840	MW303-8	North
0849	MW303-12	Northwest
0856	RW303-4	South
0908	RW303-6	South
0916	MW303-7	East
0936	03-109	West
0947	HMW303-3	North
0955	HMW303-4	South
1000	RW303-7	South
1020	RW303-15	Southeast
1023	HMW303-1	South
1028	HMW303-2	West
1033	RW303-9	North
1037	HMW303-9	Northwest
1056	03-102	South

Beth Rercher 9/10/12

9/10/12 TO 55 Adak LTM 2012

Time	Well	Direction
1100	03-103	South
1105	~~CTMW~~ 10 CTO124 MW13	Northwest
1112	RW303-13	West
1124	HMW303-10	West
1127	RW303-16	Northwest
1134	CTO124-MW14	West
1140	03-898	Northwest
1322	03-518	Southwest
1330	HMW303-11	South
1339	03-101	West
1404	03-502	North
1438	03-107	West
1442	Site Overview	Northwest

1600 End of Day

Bobby Kercher 9/10/12

TO 55 Adak LTM 2012 9/12/12

0800 Health and Safety QC Planning Meeting Modified Level D PPE

0940 At bunker
Calibrate Team 2's Horiba
See Team 2 log book for Model number

PH	Cond	Turb	DO	Temp	Sal
3.99	4.57	0.0	12.03	7.33	0.2

ORP
216

The following documents activities performed to neutralize preserved DRO bottles (Lower ORP)

Mix Baking Soda and water Solution ~~with~~ using ~ 7 spoonfuls of expired baking soda (exp 9/2011) and ~ 1 L tap water. Added baking soda solution to DRO water bottles (1 L amber w/ ~ 2 mL 1:1 HCl), added ~ 150 mL solution. After one bottle, tested pH to be 6.80. Proceeded with procedure for ~ 15 bottles. Poured neutralized contents into plastic bucket. Measured pH at 7.64. Discarded/discharged water to ground.

1100 Collect Sample IDW-Petro 2012 from Purge drum collected from Petroleum Sites Analyzed for: VOCs 3 VOA Bottles

Duncan Leith 9/12/12 Elizabeth Kercher 9/12/12

9/12/12 TO 55 Adak LTM 2012
GRO - 3 VOAs
total Metals (Pb) 1 500ml Poly w/ HNO_3
DRO - 2 HCl preserved 1L AMBER
1115 Collect IDW: CERCLA-2012
from Purge water drum
Collected from Cercla Sites
Analyze for
GRO - 3 VOAs
Total Pb - 1 500ml Poly Preserved
with HNO_3
DRO - 2 1L Ambers Preserved
with HCl
PCE - Daughters - 3 VOAs
TCLP RCRA - 2 1L Poly unpreserved
TCLP VOCs - 2 500ml Amber
unpreserved
1145 At Condo to pack Sample
Sacs and complete paperwork
1330 Complete Paperwork
Horiba Calibration

PH	Cond	turb	DO	Temp	Sal	ORP
3.99	4.58	0.0	11.70	9.35	0.2	255

Beth Kercher
9/12/12

TO 55 Adak LTM 2012 9/13/12

1045 Call Goldstreak Reservations
Set up Sample Coolers
Shipment to CAS 9 Coolers
2 50 lbs Dimentions 24x12x12
total weight = 450 lbs.
ADK - ANK #161
ANK - SEA #108
SEA - PDX #2545 Arrives 750AM
Friday 9/14/12 tracking # 8168015Z
1110 Call Goldstreak Reservations to
Set up Shipment of Sampling
equipment.

Qty	Wt	Dimentions
2	45	25x16x3
3	15	18x15x5
2	25	9x24x16
1	20	24x16x8
1	15	12x12x12
1	30	24x12x12

ADK - ANK #161
ANK - SEA #108
SEA - Dallas/Ft Worth #648
Arrives 1247pm Friday 9/14/12
Tracking # 816880314
Beth Kercher 9/13/12

13 empty Coolers to be Shipped
General freight. No Reservation
Needed.
Cooler Dimentions 24x12x12
1245 Call Goldstreak to See about
Sending the empty Coolers
on Priority 10 Coolers
weight 25 each
Dimentions 24x12x12
to PDX. Tracking # 81680804
ADK - ANE #161
ANE - SEA #112
SEA - PDX # 2473 Arrives
at 950AM.
finish DeMOB
1700 B Kercher Departs for Airport
9/13/12

Both Kercher

NO FURTHER ENTRIES AT 12-19-12
(cont Jm)

APPENDIX B

SAMPLING DEVIATION FORMS

SEALASKA ENVIRONMENTAL SERVICES

CONTRACT NUMBER: N44255-09-D-4005

FIELD CHANGE REQUEST (FCR)

TASK ORDER # 55 FCR # FCR-TO55-01 DATE 9/11/12

LOCATION: Former Naval Complex, Adak, Alaska NTR / RPM Brian Cullen / Aaron Vernik

1. Document to be changed. Identify revision, date, section, drawing, etc.

Waste Management Plan, Annual Monitoring and Inspections, Operable Unit A, Former Naval Complex, Adak, Alaska (June 2012)

2. Description of existing requirement and proposed change (Attach sheet if necessary)

Section 2.1.3 indicates drummed purge water from wells from CERCLA sites (SWMUs 14 and 17) will be analyzed for a consortium of analytes of concern from all CERCLA sites with wells. The list of analyses includes total analysis of 13 priority pollutant metals plus aluminum by EPA Method 6020.

Since the only metal of concern for CERCLA sites SWMUs 14 and 17 is lead, it is not necessary to analyze for aluminum and 12 of the other priority pollutant metals. Rather, the CERCLA IDW sample will be analyzed for total lead by EPA Method 6020A (and no other total metals).

3. Reason for Change (Attach sheet if necessary)

Since the only metal of concern for CERCLA sites (SWMUs 14 and 17) is lead, it is not necessary to analyze for aluminum and 12 of the 13 priority pollutant metals. The CERCLA IDW sample will be analyzed for total lead by EPA Method 6020A (and no other total metals).

4. Originator: (print name and sign) Sherri Wunderlich Sherri L Wunderlich		**Title** Project Chemist / Program QC Manager	**Date** 9/11/12
Reviewed by: (print name and sign) Annette Franzen		**Title** Task Order Manager	**Date** 9/11/12
Site Superintendent (Print name and sign) Andy Lewis	**Date** 9/11/12	**Task Order Manager (Print name and sign)** Annette Franzen	**Date** 9/11/12
Program QC Manager (Print Name and Sign) Sherri Wunderlich Sherri L Wunderlich	**Date** 9/11/12	**NTR Acknowledgement (Print name and sign)** John V. Pitz JOHN PITZ	**Date** 12/6/12

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	55
Site Name:	NMCB Building T-1416 Expanded Area	Location:	NMCB-07 & NMCB-10
Inspector(s):	Brian Giles, Don Balmer, and John Highstone	Date/Time:	8/28/2012 11:12 & 12:05
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Overcast, 10 mph wind, 48° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Gasoline range organics, diesel range organics, benzene

Standard Procedure for Field Collection and Laboratory Analysis (cite references):
2012 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 4-1 page 2, Table 4-2 page 17, and Table 4-3 page 2.

Reason for Change in Field Procedure or Analytical Variation:
Product thickness in wells NMCB-07 and NMCB-10 are 0.37 and 0.21 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:	Brian Giles, Don Balmer, John Highstone	Date:	8/28/12
NAVFAC NW RPM:	Jason S. Verrill	Date:	8/31/12
Project Manager:	Annette Franzen	Date:	8/29/12
QA Officer/Reviewer:	Sherri Wunderlich Sherri L Wunderlich	Date	8/29/12

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	55
Site Name:	NMCB Building T-1416 Expanded Area	Location:	02-818
Inspector(s):	Andy Lewis and Robert Boyd	Date/Time:	8/29/2012 08:10
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Overcast, breezy, 50° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Gasoline range organics, diesel range organics, benzene

Standard Procedure for Field Collection and Laboratory Analysis (cite references):
2012 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 4-1 page 2, Table 4-2 page 17, and Table 4-3 page 2.

Reason for Change in Field Procedure or Analytical Variation:
Product thickness in well 02-818 is 0.05 feet.

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 Robert Boyd	Date:	8/29/12
NAVFAC NW RPM:	Jane S. Veith	Date:	8/31/12
Project Manager:	Annette Franzen	Date:	8/30/12
QA Officer/Reviewer:	Sherri Wunderlich	Date	8/30/12

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	55
Site Name:	SA 78, Old Transportation Building, USTs 10583, 10584, and ASTs	Location:	NL-10
Inspector(s):	Don Balmer and Brian Giles	Date/Time:	8/31/2012 09:05
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Cloudy, foggy, windy, ~50° F		

Material to Be Sampled:
Surface water and sediment

Measurement Parameter:
Gasoline range organics, diesel range organics, benzene, toluene, ethylbenzene, xylenes, and polycyclic aromatic hydrocarbons

Standard Procedure for Field Collection and Laboratory Analysis (cite references):
2012 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 4-1 page 4, Table 4-2 page 18, and Table 4-3 page 2.

Reason for Change in Field Procedure or Analytical Variation:
No contamination was observed during shoreline inspection.

Variation From Field or Analytical Procedure:
No surface water or sediment sample was collected because no contamination was observed.

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Don Balmer and Brian Giles	Date:	8/31/12
NAVFAC NW RPM:	Aaron S. Vermil	Date:	9/5/12
Project Manager:	Annette Franzen	Date:	9/04/12
QA Officer/Reviewer:	Sherri Wunderlich Sherri L Wunderlich	Date	9/01/12

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	55
Site Name:	SWMU 58/SA 73, Heating Plant 6	Location:	12-121
Inspector(s):	Andy Lewis and Robert Boyd	Date/Time:	8/31/2012 14:05
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Rain, wind, 53° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Diesel range organics

Standard Procedure for Field Collection and Laboratory Analysis (cite references):
2012 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 4-1 page 9, Table 4-2 page 20, and Table 4-3 page 4.

Reason for Change in Field Procedure or Analytical Variation:
Product thickness in well 12-121 is 0.03 feet.

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 Robert Boyd	Date:	8/31/12
NAVFAC NW RPM:	Jason S. Verrill	Date:	9/5/12
Project Manager:	Annette Franzen	Date:	9/04/12
QA Officer/Reviewer:	Sherri Wunderlich Sherri L Wunderlich	Date	9/01/12

SAMPLING DEVIATION FORM

Project Name:	Annual Monitoring & Inspections	Contract No.:	N44255-09-D-4005
Location:	Former Naval Complex, Adak, Alaska	Task No.:	55
Site Name:	Former Power Plant, Building T-1451	Location:	01-151
Inspector(s):	Andy Lewis and Robert Boyd	Date/Time:	9/01/2012 14:10
Company:	Sealaska Environmental Services, LLC		
Weather/Temperature:	Overcast, wind, 51° F		

Material to Be Sampled:
Groundwater

Measurement Parameter:
Diesel range organics, benzene, toluene, ethylbenzene, xylenes, and polycyclic aromatic hydrocarbons
Matrix spike/matrix spike duplicate for benzene, toluene, ethylbenzene, xylenes.

Standard Procedure for Field Collection and Laboratory Analysis (cite references):
2012 Revised Tables to Final Comprehensive Monitoring Plan, Revision 5, Appendix A, Table 4-1 page 1, Table 4-2 page 16, Table 4-3 page 1, and Table 5-5, page 9.

Reason for Change in Field Procedure or Analytical Variation:
Well could not be located as it has apparently been removed during recent remediation activities.

Variation From Field or Analytical Procedure:
No sample was collected because well 01-151 was not located.
A matrix spike/matrix spike duplicate for benzene, toluene, ethylbenzene, xylenes will be performed on another groundwater sample.

Special Equipment, Materials, or Personnel Required:

Initiator's Name:	Andy Lewis and Robert Boyd	Date:	9/01/12
NAVFAC NW RPM:	Jason S Lewis	Date:	9/5/12
Project Manager:	Annette Franzen	Date:	9/04/12
QA Officer/Reviewer:	Sherri Wunderlich	Date	9/02/12

APPENDIX C

DATA SUMMARY TABLE—1999 THROUGH 2012

Summary of Groundwater Analytical Results 2006 through 2012
TO 55 Groundwater 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
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
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
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	
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								

Summary of Groundwater Analytical Results 2006 through 2012
TO 55 Groundwater 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
Former Power Plant, Building T-1451	TANK FARM A AREA	WLM	E-701	VOA	Xylenes	ug/l				3U		1U								
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
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				
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
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
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										

Summary of Groundwater Analytical Results 2006 through 2012
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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
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
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				
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										
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
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
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						

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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		
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												
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	
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	
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											

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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											
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											

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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												
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	
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											

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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
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											
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										

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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
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	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										
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	TPH	TPH-Gasoline	ug/l	20U	20U	90U	50U										
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										
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	BTEX (total)	ug/l	0.4U													
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	Ethylbenzene	ug/l	0.2U	0.2U	2U	1U										
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	m,p-Xylene	ug/l	0.4U	0.4U	2U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	o-Xylene	ug/l	0.2U	0.2UJ	2U											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	Toluene	ug/l	0.3U	0.3U	2U	1U										
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	Xylenes	ug/l				3U										
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	WLM	03-012	VOA	Xylenes (total)	ug/l	0.4U													
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											
Housing Area (Arctic Acres)	DOWNTOWN HOUSING AREA	GW	03-562	TPH	Ethylbenzene	ug/l			0.5U											

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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										

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Housing Area (Arctic Acres)	Housing Area (Arctic Acres)	WLM	AA-05	VOA	Benzene	ug/l			0.2U											
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											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Antimony	ug/l			1U											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Arsenic	ug/l			84.6											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Barium	ug/l			754											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Beryllium	ug/l			5.12											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Cadmium	ug/l			6.5											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Chromium	ug/l			652											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Lead	ug/l			91.5											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Mercury	ug/l			1U											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Nickel	ug/l			225											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Selenium	ug/l			2.7											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-10	TIN	Thallium	ug/l			1.75											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Antimony	ug/l			1U											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Arsenic	ug/l			2.11											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Barium	ug/l			25.6											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Beryllium	ug/l			1U											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Cadmium	ug/l			1U											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Chromium	ug/l			3.45											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Lead	ug/l			1.05											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Mercury	ug/l			1U											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Nickel	ug/l			4.46											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Selenium	ug/l			1U											
DOWNTOWN HOUSING AREA	DOWNTOWN HOUSING AREA	HDPCH	TDEM-5	TIN	Thallium	ug/l			1U											
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										

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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										
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										

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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
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	
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-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						
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										

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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
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										

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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										
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										

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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										
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

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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
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										
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										

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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										
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										

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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			
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	
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											

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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										
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										

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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	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	0.50U				
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			
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	
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
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										

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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										
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			

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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					
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			

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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
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	
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			
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												

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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
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
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											

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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											
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											

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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
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											
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											

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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													
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												

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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											
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											

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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												
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												

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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
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				
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									

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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
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				
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											

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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
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			
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												

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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
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
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
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			
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				

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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
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
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
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										
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										

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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
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
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
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
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
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
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
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

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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
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
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
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
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
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
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
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
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
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
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
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
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
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-231	VOA	BTEX (total)	ug/l	360												345.9D	367.8JD
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	TPH	C10-C24 Aliphatics	ug/l	100U	80UJ												
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										

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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
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	02-232	VOA	BTEX (total)	ug/l	0.6													3.94J
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
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
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
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
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
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
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					
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					

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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
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
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
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
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
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
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
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
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
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
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
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
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
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
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	SVOA	Naphthalene	ug/l									130D	120D	200D	11D	0.19	55JD
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
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
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
South of Runway 18-36 Area	SOUTH RUNWAY AREA	WLM	AS-1	VOA	Ethylbenzene	ug/l									35	19	34	15	0.26J	9.1
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
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
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
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
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											
SOUTH RUNWAY AREA	SOUTH RUNWAY AREA	RV	SSC-001	VOA	Chlorobenzene	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
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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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
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											

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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
South of Runway 18-36 Area	TANK FARM A AREA	WLM	E-216	TPH	C10-C24 Aliphatics	ug/l		93J												
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		

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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		
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										

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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										
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										

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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											
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
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
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

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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
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
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
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				
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
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											

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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											
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
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
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
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										

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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
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										
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						

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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						
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											

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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											
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											

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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											
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													

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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											
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											

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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										
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										

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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						
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										

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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											
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											

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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											
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
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										

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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
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										
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
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
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
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
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											

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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										
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										

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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										
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										

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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										
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											

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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											
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												

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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										
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										

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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										
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											

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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											
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											

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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										
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										

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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						
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											

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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											
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											

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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		
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										

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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										
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										

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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											
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											

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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
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											
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											

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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
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											
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											

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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
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											
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									

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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										
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									

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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	
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									
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	
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							

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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
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	
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	
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	
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	
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										
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											

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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											
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											

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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	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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									
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									

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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									
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						

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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					
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										

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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												
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									

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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
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
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
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
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
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
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
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
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
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
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
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
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
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
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	SVOA	Naphthalene	ug/l										41D	27D	30D	34D	42D
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
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
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
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	LC5A (OLD 1)	VOA	BTEX (total)	ug/l	81													55.6J
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
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
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
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
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
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												

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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
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
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Acenaphthene	ug/l													0.29	0.18
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Acenaphthylene	ug/l													0.080U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Anthracene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Benzo(a)anthracene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Benzo(a)pyrene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Benzo(b)fluoranthene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Benzo(g,h,i)perylene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Benzo(k)fluoranthene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Chrysene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Dibenz(a,h)anthracene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Fluoranthene	ug/l													0.023	0.018J
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Fluorene	ug/l													1.4	0.22
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Indeno(1,2,3-cd)pyrene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Naphthalene	ug/l													0.55X	0.25X
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Phenanthrene	ug/l													0.12	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	SVOA	Pyrene	ug/l													0.021	0.028
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	TPH	TPH-Diesel	ug/l													1100Y	1600Y
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
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	BTEX (total)	ug/l													6.26J	10.86J
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	Ethylbenzene	ug/l													0.29J	0.25J
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	m,p-Xylene	ug/l													0.80	0.50
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	o-Xylene	ug/l													0.29J	0.11J
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	Toluene	ug/l													0.28J	0.70U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	650	VOA	Xylenes (total)	ug/l													1.09J	0.61J
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	2-Methylnaphthalene	ug/l													21D	20D
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Acenaphthene	ug/l													0.86	0.96
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Acenaphthylene	ug/l													0.20U	0.18U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Anthracene	ug/l													0.058	0.050
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Benzo(a)anthracene	ug/l													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
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Benzo(b)fluoranthene	ug/l													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
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Benzo(k)fluoranthene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Chrysene	ug/l													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
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Fluoranthene	ug/l													0.065	0.064
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Fluorene	ug/l													3.1	2.5

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SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Indeno(1,2,3-cd)pyrene	ug/l													0.020U	0.020U
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Naphthalene	ug/l													25D	29D
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Phenanthrene	ug/l													1.5	0.93
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	SVOA	Pyrene	ug/l													0.050	0.056
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	TPH	TPH-Diesel	ug/l													1200Y	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
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	BTEX (total)	ug/l													106.84	93.44
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	Ethylbenzene	ug/l													24	22
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	m,p-Xylene	ug/l													78	66
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	o-Xylene	ug/l													0.94	0.84
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	Toluene	ug/l													1.2	1.7
SWMU 60, Tank Farm A	TANK FARM A AREA	WLM	651	VOA	Xylenes (total)	ug/l													78.94	66.84
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
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

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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											
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												

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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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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												
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

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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
SWMU 61, Tank Farm B	TANK FARM B AREA	WLM	14-210	VOA	BTEX (total)	ug/l	4U													
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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									
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						

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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	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											
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											
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	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										

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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
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
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	

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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
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
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											
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		

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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
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
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	
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					

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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
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
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
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
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
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											
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	

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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
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
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

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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
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		
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		

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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	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
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
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
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
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
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
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
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
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
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
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
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	VOA	Ethylbenzene	ug/l								2500	1500D		2100D		1900D	1900DJ
SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	VOA	Toluene	ug/l								730	680JD		610D		270D	230DJ
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
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

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SWMU 62, Sandy Cove 102, 107, and 146 Area	DOWNTOWN HOUSING AREA	WLM	MRP-MW3	VOA	Xylenes	ug/l								13100	8400D		11400D		10800D	11400DJ
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
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
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
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
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	
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											

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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
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											
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-175	VOA	Carbon disulfide	ug/l			1U											

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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
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										

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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
Tanker Shed, UST 42494	EAST RUNWAY AREA	RW	04-302	VOA	1,1-Dichloroethene	ug/l				1U										
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										

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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
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										
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										

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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										
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										

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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
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										
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
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											

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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											
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										

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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										
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
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										

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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
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										
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										

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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
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				
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
SWMU 60, Tank Farm A	TANK FARM A AREA	RV	852	TPH	TPH-Diesel	ug/l	900	93Z	84J	1000Y	580Y	1200Y	130
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
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
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
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
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
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
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		

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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
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		
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		

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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			
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		

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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		
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		

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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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-7	TPH	TPH-Diesel	ug/l	170	46J	14J	96Y	100U	170Y	49U
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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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
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
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
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-8	TPH	TPH-Diesel	ug/l	49	49U	130Y	180Y	50U	78U	50U
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
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
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
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
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
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
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					
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
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
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
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
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
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
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
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
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

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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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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			

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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
Former Power Plant, Building T-1451			NL-08	VOA	Ethylbenzene	ug/l					2	2.3	1.3
Former Power Plant, Building T-1451			NL-08	VOA	m,p-Xylene	ug/l					1.7	2.1	1.1
Former Power Plant, Building T-1451			NL-08	VOA	o-Xylene	ug/l					0.29J	0.37J	0.17J
Former Power Plant, Building T-1451			NL-08	VOA	Toluene	ug/l					0.89	1.1	0.77UJ
Former Power Plant, Building T-1451			NL-08	VOA	Xylenes	ug/l					1.99J	2.5J	1.27J
Former Power Plant, Building T-1451			NL-08	SVOA	2-Methylnaphthalene	ug/l					0.0031J	0.020	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Acenaphthene	ug/l					0.020U	0.0049J	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Acenaphthylene	ug/l					0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Anthracene	ug/l					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
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(a)pyrene	ug/l					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
Former Power Plant, Building T-1451			NL-08	SVOA	Benzo(g,h,i)perylene	ug/l					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
Former Power Plant, Building T-1451			NL-08	SVOA	Chrysene	ug/l					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
Former Power Plant, Building T-1451			NL-08	SVOA	Fluoranthene	ug/l					0.020U	0.0046J	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Fluorene	ug/l					0.0041J	0.018J	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
Former Power Plant, Building T-1451			NL-08	SVOA	Indeno(1,2,3-cd)pyrene	ug/l					0.020U	0.020U	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Naphthalene	ug/l					0.058U	0.064	0.0083J
Former Power Plant, Building T-1451			NL-08	SVOA	Phenanthrene	ug/l					0.020U	0.012J	0.020U
Former Power Plant, Building T-1451			NL-08	SVOA	Pyrene	ug/l					0.0075J	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
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Ethylbenzene	ug/l					13	15	8.8
SWMU 62, New Housing Fuel Leak			NL-09	VOA	m,p-Xylene	ug/l					9.1	9.2	6.0
SWMU 62, New Housing Fuel Leak			NL-09	VOA	o-Xylene	ug/l					1.4	3.8	1.0
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Toluene	ug/l					4.4	6.9	4.5
SWMU 62, New Housing Fuel Leak			NL-09	VOA	Xylenes	ug/l					10.5	13	7.0
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	2-Methylnaphthalene	ug/l					0.032	0.062	0.023
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Acenaphthene	ug/l					0.013J	0.035	0.0099J
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Acenaphthylene	ug/l					0.0070J	0.021U	0.0094J
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Anthracene	ug/l					0.020U	0.021U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(a)anthracene	ug/l					0.020U	0.021U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(a)pyrene	ug/l					0.020U	0.021U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(b)fluoranthene	ug/l					0.020U	0.021U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(g,h,i)perylene	ug/l					0.020U	0.021U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Benzo(k)fluoranthene	ug/l					0.020U	0.021U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Chrysene	ug/l					0.020U	0.021U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Dibenz(a,h)anthracene	ug/l					0.020U	0.021U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Fluoranthene	ug/l					0.0087J	0.0047J	0.0050J
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Fluorene	ug/l					0.027	0.12	0.023
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Indeno(1,2,3-cd)pyrene	ug/l					0.020U	0.021U	0.020U
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Naphthalene	ug/l					0.14	0.53	0.14
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Phenanthrene	ug/l					0.015J	0.035	0.0086J
SWMU 62, New Housing Fuel Leak			NL-09	SVOA	Pyrene	ug/l					0.0087J	0.0072J	0.0074J
SWMU 62, New Housing Fuel Leak			NL-09	TPH	TPH-Diesel	ug/l					280J	1500Y	110Y
SWMU 62, New Housing Fuel Leak			NL-09	TPH	TPH-Gasoline	ug/l					230Y	260Y	150Y

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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
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
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
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
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
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

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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
South of Runway 18-36 Area	SOUTH RUNWAY AREA	RV	NSWSD-2	TPH	TPH-Diesel	ug/kg	270000J	550000Y	390000YJ	15000000YHJ	1600000Y	500000Y	1400000Y
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		
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
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
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
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
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

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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
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
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
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		
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		

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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
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
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	TPH	TPH-Diesel	ug/kg				89000Y	160000Z	100000Z	
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
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Ethylbenzene	ug/kg		12U	270	66U	700U	500U	670UJ
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	m,p-Xylene	ug/kg		23U	26000J	62J	700U	500U	670UJ
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	o-Xylene	ug/kg		12U	240U	66U	700U	500U	670UJ
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Toluene	ug/kg		12U	240U	66U	700U	500U	670UJ
SWMU 61, Tank Farm B	TANK FARM B AREA	SWS	NL-04	VOA	Xylenes	ug/kg		35U	26000J	62J	1400U	1000U	1340UJ
NMCB Building T-1416 Expanded Area	NMCB, UST T-1416-A		NL-05	TPH	TPH-Gasoline	ug/kg				7000U	6800U	6400U	5400U
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
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

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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
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
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
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
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 D

SUMMARY OF 2012 AND HISTORICAL DEPTH-TO-WATER MEASUREMENTS

Appendix D-1
2012 Depth to Water and Product Thickness Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

	Location Cross-Reference	Date	Sample Collected	Casing Elevation (feet MLLW)	Depth to Water (feet)	Product Thickness (feet)	Type of Product	Corrected Depth to Water*	GW Surface Elevation (feet MLLW)	Comments
Former Power Plant, Building T-1451	01-118	9/1/12	Y	19.68	16.62	0	NA	16.62	3.06	
	01-150	9/1/12	Y	22.68	20.04	0	NA	20.04	2.64	
	01-151	9/1/12	N	8.67	NA	0	NA	NA	NA	Well removed during July 2012 petroleum sites remediation activities.
GCI Compound, UST GC-1	04-100	9/3/12	Y	32.80	28.11	0	NA	28.11	4.69	
	04-201	9/3/12	N	30.61	25.63	0	GRO	25.63	4.98	Trace product present
	04-202	9/3/12	Y	30.90	25.77	0.01	GRO	25.76	5.14	
	04-203	9/3/12	N	31.13	26.27	0	NA	26.27	4.86	
	04-204	9/3/12	Y	30.82	25.68	0	NA	25.68	5.14	
	04-210	9/3/12	Y	29.22	24.72	0	NA	24.72	4.50	
	04-211	9/3/12	N	28.45	23.75	0	NA	23.75	4.70	
	04-213	9/3/12	Y	28.70	23.76	0	NA	23.76	4.94	
	04-701	9/3/12	Y	18.19	14.13	0	NA	14.13	4.06	
NMCB	02-300	8/28/12	N	11.99	10.94	0.69	DRO	10.37	1.62	
	02-301	8/28/12	N	14.87	12.67	0	NA	12.67	2.20	
	02-451	8/28/12	N	10.99	9.25	0	NA	9.25	1.74	
	02-452	8/28/12	Y	11.94	9.68	0	NA	9.68	2.26	
	02-453	8/28/12	Y	11.68	9.58	0	NA	9.58	2.10	
	02-455	8/28/12	Y	14.08	12.40	0	NA	12.40	1.68	
	02-461	8/28/12	Y	9.41	7.13	0	NA	7.13	2.28	
	02-463	8/28/12	N	12.58	10.12	0	NA	10.12	2.46	
	02-478	8/28/12	Y	10.24	8.20	0	NA	8.20	2.04	
	02-479	8/28/12	N	16.25	12.97	0	NA	12.97	3.28	
	02-497	8/28/12	N	9.15	7.41	0.08	DRO	7.34	1.81	
	02-815	8/28/12	N	16.35	14.31	0.05	DRO	14.27	2.08	
	02-816	8/28/12	N	12.86	11.00	0	NA	11.00	1.86	
	02-817	8/28/12	Y	12.49	10.33	0	NA	10.33	2.16	
	02-818	8/28/12	N	11.55	9.19	0.05	DRO	9.15	2.40	
	02-819	8/28/12	N	10.03	7.67	0	NA	7.67	2.36	
	E-201	8/28/12	Y	15.54	13.55	0	NA	13.55	1.99	
	NMCB-04	8/28/12	Y	14.49	12.33	0	NA	12.33	2.16	
	NMCB-05	8/28/12	N	6.31	4.95	0	NA	4.95	1.36	
	NMCB-07	8/28/12	N	11.85	10.53	0.37	GRO	10.26	1.59	
	NMCB-08	8/28/12	Y	8.52	9.65	0	NA	9.65	-1.13	
	NMCB-09	8/28/12	N	11.96	10.09	0	NA	10.09	1.87	
	NMCB-10	8/28/12	N	12.95	11.39	0.21	GRO	11.24	1.71	
	NMCB-11	8/28/12	Y	12.05	9.88	0.01	GRO	9.87	2.18	
	NMCB-12	8/28/12	Y	16.27	14.54	0	NA	14.54	1.73	
ROICC	08-175	9/7/12	Y	13.59	3.38	0	NA	3.38	10.21	
	08-200	9/7/12	Y	14.87	4.08	0	NA	4.08	10.79	
	08-202	9/7/12	Y	13.86	2.74	0	NA	2.74	11.12	
Runway 5-23	14-100	9/5/12	Y	15.06	2.56	0	NA	2.56	12.50	
	14-110	9/5/12	Y	15.10	2.78	0	NA	2.78	12.32	
SA 78 , Old Transportation Building	12-145	8/31/12	Y	61.88	24.49	0	NA	24.49	37.39	
	12-801	8/31/12	N	35.00	3.22	0	NA	3.22	31.78	
	12-802	8/31/12	Y	10.92	2.84	0	NA	2.84	8.08	
	MW-116	8/31/12	Y	44.96	14.19	0	NA	14.19	30.77	
	MW-117	8/31/12	N	49.81	14.25	0	NA	14.25	35.56	
SA 79, Main Road Pipeline, South End	02-230	8/27/12	Y	13.69	12.48	0	NA	12.48	1.21	
	601	8/27/12	Y	13.77	11.68	0	NA	11.68	2.09	
	MRP-MW8	8/27/12	Y	12.72	11.21	0	NA	11.21	1.51	

Appendix D-1
2012 Depth to Water and Product Thickness Measurements
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	Location Cross-Reference	Date	Sample Collected	Casing Elevation (feet MLLW)	Depth to Water (feet)	Product Thickness (feet)	Type of Product	Corrected Depth to Water*	GW Surface Elevation (feet MLLW)	Comments
SA 80, Steam Plant 4 (UST 27089 and 27090)	04-155	9/1/12	N	27.77	15.98	0	NA	15.98	11.79	
	04-157	9/1/12	N	28.18	19.22	0	DRO	19.22	8.96	Trace product present
	04-158	9/1/12	Y	27.36	19.08	0	NA	19.08	8.28	
	04-159	9/1/12	Y	29.86	23.21	0	NA	23.21	6.65	
	04-164	9/1/12	N	28.51	21.83	0	NA	21.83	6.68	
	04-173	9/1/12	Y	27.46	14.60	0	DRO	14.60	12.86	Trace product present
	04-801	9/1/12	Y	27.76	21.32	0	NA	21.32	6.44	
	SP4-2	9/1/12	N	27.23	14.34	0	NA	14.34	12.89	
	SP4-3	9/1/12	Y	26.70	20.03	0	NA	20.03	6.67	
South of Runway 18-36	02-231	8/27/12	Y	16.59	14.59	0	NA	14.59	2.00	
	02-232	8/27/12	Y	18.54	17.40	0	NA	17.40	1.14	
	02-518	8/27/12	N	7.97	6.46	0	NA	6.46	1.51	
	18/36-02	8/27/12	N	19.86	17.79	0	NA	17.79	2.07	
	AS-1	8/27/12	Y	12.10	13.71	0	NA	13.71	-1.61	
	E-207 (AMW-207)	8/27/12	N	11.98	10.04	0	NA	10.04	1.94	
	E-209 (AMW-209)	8/27/12	N	8.16	6.63	0	NA	6.63	1.53	
	E-213 (AMW-213)	8/27/12	N	13.73	11.28	0	NA	11.28	2.45	
	E-216	8/27/12	N	18.68	16.87	0.43	DRO	16.52	2.16	
	E-217 (AMW-217)	8/27/12	N	18.12	15.62	0	NA	15.62	2.50	
	RW-18/36-02	8/27/12	N	5.82	4.21	0	NA	4.21	1.61	
	RW-18/36-04	8/27/12	N	16.29	13.83	0.06	DRO	13.78	2.51	
	RW-18/36-05	8/27/12	N	11.39	9.36	0	NA	9.36	2.03	
	Z 3-2	8/27/12	N	Unknown	10.29	0	NA	10.29	Unknown	
	Z 3-6	8/27/12	N	Unknown	7.68	0	NA	7.68	Unknown	
	Z 4-2	8/27/12	N	Unknown	12.62	0	NA	12.62	Unknown	
SWMU 14, Old Pesticide Storage and Disposal Area	MW-14-5	8/30/12	Y	21.94	15.87	0	NA	15.87	6.07	
	01-153	8/30/12	Y	24.29	18.46	0	NA	18.46	5.83	
	MW-15-424	8/30/12	N	21.94	18.40	0	NA	18.40	3.54	
	MW15-3	8/30/12	N	18.90	13.81	0	NA	13.81	5.09	
SWMU 17, Power Plant No. 3 Area	05-735	9/4/12	Y	19.00	15.98	0	NA	15.98	3.02	
	05-375	9/5/12	Y	13.00	4.33	0	NA	4.33	8.67	
	PP-05	9/5/12	Y	38.47	10.91	0	NA	10.91	27.56	
	R-1	9/4/12	Y	13.43	2.24	0	NA	2.24	11.19	
SWMU 58 and SA 73, Heating Plant 6	12-105	8/29/12	Y	73.26	10.78	0	NA	10.78	62.48	
	12-106	8/29/12	N	72.99	10.54	0	NA	10.54	62.45	
	12-114	8/29/12	Y	70.97	10.01	0	NA	10.01	60.96	
	12-121	8/29/12	Y	76.01	13.68	0.03	DRO	13.66	62.35	
	12-124	8/29/12	N	77.08	13.13	0	NA	13.13	63.95	
	12-125	8/29/12	N	73.52	10.93	0	NA	10.93	62.59	
	12-203	8/29/12	Y	76.11	12.77	0	NA	12.77	63.34	
	12-601	8/29/12	N	63.75	4.40	0	NA	4.40	59.35	
	12-604	8/29/12	N	46.39	10.90	0	NA	10.90	35.49	
	12-610	8/29/12	N	65.66	16.35	0	NA	16.35	49.31	
	12-611	8/29/12	N	58.11	4.08	0	NA	4.08	54.03	
SWMU 60, Tank Farm A	650	9/5/12	Y	13.11	10.09	0	NA	10.09	3.02	
	651	9/5/12	Y	12.08	9.11	0	NA	9.11	2.97	
	652	9/5/12	Y	12.37	9.40	0	NA	9.40	2.97	
	653	9/5/12	Y	15.10	10.16	0.01	NA	10.15	4.95	
	LC5A	9/5/12	Y	10.86	6.23	0	NA	6.23	4.63	
	MW E006	9/5/12	Y	156.42	6.07	0	NA	6.07	150.35	
SWMU 61, Tank Farm B	14-113	9/6/12	Y	9.14	3.07	0	NA	3.07	6.07	
	14-210	9/1/12	Y	12.12	2.34	0	NA	2.34	9.78	
	TFB-MW4B	9/1/12	Y	37.44	4.62	0	NA	4.62	32.82	

Appendix D-1
2012 Depth to Water and Product Thickness Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

	Location Cross-Reference	Date	Sample Collected	Casing Elevation (feet MLLW)	Depth to Water (feet)	Product Thickness (feet)	Type of Product	Corrected Depth to Water*	GW Surface Elevation (feet MLLW)	Comments
SWMU 62, New Housing Fuel Leak	03-104	9/8/12	Y	25.13	19.48	0	NA	19.48	5.65	
Sandy Cove	03-155	9/8/12	Y	26.27	18.93	0	NA	18.93	7.34	
	03-619	9/8/12	Y	23.35	16.34	0	NA	16.34	7.01	
	03-778	9/8/12	Y	25.30	19.53	0	NA	19.53	5.77	
	03-802	9/8/12	Y	23.17	16.60	0	NA	16.60	6.57	
	03-895	9/8/12	Y	26.21	21.54	0	NA	21.54	4.67	
	HMW-102-1	9/8/12	N	25.29	19.38	0	NA	19.38	5.91	
	HMW-146-1	9/8/12	N	23.52	16.64	0	NA	16.64	6.88	
	HMW-146-3	9/8/12	Y	23.41	16.25	0	NA	16.25	7.16	
	MRP-MW2	9/8/12	Y	26.99	21.38	0	NA	21.38	5.61	
	MRP-MW3	9/8/12	Y	27.25	7.67	0	NA	7.67	19.58	
	MW-107-1	9/8/12	Y	25.65	18.22	0	NA	18.22	7.43	
	MW-134-10	9/8/12	N	24.82	17.31	0	NA	17.31	7.51	
	MW-134-11	9/8/12	Y	26.53	18.01	0	NA	18.01	8.52	
	MW-146-1	9/8/12	Y	24.42	17.12	0	NA	17.12	7.30	
	MW-187-1	9/8/12	Y	26.86	19.05	0	NA	19.05	7.81	
	RW-102-4	9/8/12	N	25.28	19.14	0	NA	19.14	6.14	
SWMU 62, New Housing Fuel Leak	03-101	9/10/12	N	26.01	22.58	0	NA	22.58	3.43	
Eagle Bay Housing	03-102	9/10/12	N	17.27	14.22	0	NA	14.22	3.05	
	03-103	9/10/12	Y	18.93	16.05	0	NA	16.05	2.88	
	03-107	9/10/12	N	31.30	27.46	0	NA	27.46	3.84	
	03-109	9/10/12	Y	33.69	30.07	0	NA	30.07	3.62	
	03-502	9/10/12	Y	28.04	24.00	0	NA	24.00	4.04	
	03-518	9/10/12	N	31.04	27.18	0	NA	27.18	3.86	
	03-898	9/10/12	Y	14.83	13.02	0	NA	13.02	1.81	
	AMW-704	9/10/12	Y	8.21	7.09	0	NA	7.09	1.12	
	CTO-124-MW14	9/10/12	N	13.74	11.03	0	NA	11.03	2.71	
	CTO-124-MW15	9/10/12	N	20.96	17.82	0	NA	17.82	3.14	
	HMW-303-1	9/10/12	N	30.78	27.11	0	NA	27.11	3.67	
	HMW-303-2	9/10/12	N	30.55	26.93	0	NA	26.93	3.62	
	HMW-303-3	9/10/12	N	31.64	27.85	0	NA	27.85	3.79	
	HMW-303-4	9/10/12	N	30.20	26.16	0	NA	26.16	4.04	
	HMW-303-9	9/10/12	N	29.54	26.35	0	NA	26.35	3.19	
	HMW-303-10	9/10/12	N	9.78	6.49	0	NA	6.49	3.29	
	HMW-303-11	9/10/12	N	30.35	26.70	0	NA	26.70	3.65	
	MW-303-7	9/10/12	Y	26.78	21.72	0	NA	21.72	5.06	
	MW-303-8	9/10/12	N	27.39	22.82	0	NA	22.82	4.57	
	MW-303-12	9/10/12	N	25.80	21.45	0	NA	21.45	4.35	
	MW-303-14	9/10/12	N	28.10	22.48	0	NA	22.48	5.62	
	RW-303-4	9/12/12	N	27.89	22.15	0	NA	22.15	5.74	
	RW-303-6	9/10/12	N	29.09	23.53	0	NA	23.53	5.56	
	RW-303-7	9/10/12	N	26.61	22.62	0	NA	22.62	3.99	
	RW-303-9	9/10/12	N	28.34	24.71	0	NA	24.71	3.63	
	RW-303-13	9/10/12	Y	8.98	6.88	0	NA	6.88	2.10	
	RW-303-14	9/10/12	Y	10.53	7.96	0	NA	7.96	2.57	
	RW-303-15	9/10/12	N	31.26	27.67	0	NA	27.67	3.59	
	RW-303-16	9/10/12	Y	11.02	7.94	0	NA	7.94	3.08	

Appendix D-1
2012 Depth to Water and Product Thickness Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

	Location Cross-Reference	Date	Sample Collected	Casing Elevation (feet MLLW)	Depth to Water (feet)	Product Thickness (feet)	Type of Product	Corrected Depth to Water*	GW Surface Elevation (feet MLLW)	Comments
Tanker Shed, UST 42494	04-175	8/31/12	Y	11.34	6.96	0	NA	6.96	4.38	
	04-176	8/31/12	N	11.33	7.11	0	NA	7.11	4.22	
	04-178	8/31/12	N	11.32	7.02	0	NA	7.02	4.30	
	04-290	8/31/12	Y	11.19	7.41	0	NA	7.41	3.78	
	04-301	8/31/12	N	11.35	7.06	0	DRO	7.06	4.29	Trace product present
	04-302	8/31/12	N	11.13	7.82	0	NA	7.82	3.31	
	04-303	8/31/12	N	11.13	6.83	0	NA	6.83	4.30	
	04-304	8/31/12	N	11.20	7.03	0	NA	7.03	4.17	
	04-306	8/31/12	Y	11.17	7.31	0	NA	7.31	3.86	
	04-307	8/31/12	N	11.38	7.21	0	NA	7.21	4.17	
	04-308	8/31/12	N	11.47	7.25	0	NA	7.25	4.22	
	04-309	8/31/12	N	11.00	6.92	0	NA	6.92	4.08	
	04-310	8/31/12	N	11.18	7.02	0	NA	7.02	4.16	
	04-311	8/31/12	N	10.93	6.64	0	NA	6.64	4.29	
	04-312	8/31/12	N	11.21	6.93	0	NA	6.93	4.28	
	04-313	8/31/12	N	11.35	6.97	0	NA	6.97	4.38	
	04-314	8/31/12	N	11.22	6.94	0	NA	6.94	4.28	
	04-317	8/31/12	N	11.20	7.20	0	NA	7.20	4.00	
	04-601	8/31/12	Y	13.72	10.95	0	NA	10.95	2.77	
	TS-03	8/31/12	N	9.61	6.67	0	NA	6.67	2.94	
	TS-04	8/31/12	N	10.41	7.11	0	NA	7.11	3.30	

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 2011 analytical 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
Summary of Historical Depth to Water Measurements
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Former Naval Complex, Adak, Alaska

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	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	09/16/05	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	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	09/18/05	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	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
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

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Summary of Historical Depth to Water Measurements
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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	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
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	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	202	04-202	MW	07/31/2002	25.61			5.29
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	9/3/2012	25.76	GRO	0.01	5.14
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	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	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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	9/21/2006	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
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	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	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	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

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Summary of Historical Depth to Water Measurements
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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	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
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)	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

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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	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
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)	DOWNTOWN	421	03-421	MW	05/11/2001	23.43	Diesel	0.6	6.38

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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	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

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	08/16/2001	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
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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	10/01/2001	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
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

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Summary of Historical Depth to Water Measurements
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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	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
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

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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	06/22/2002	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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Former Naval Complex, Adak, Alaska

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	08/07/2002	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
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

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Summary of Historical Depth to Water Measurements
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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	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
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

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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	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	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
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

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Summary of Historical Depth to Water Measurements
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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	06/29/2001	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

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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	08/13/2001	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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

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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	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
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

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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	06/25/2002	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

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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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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

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Summary of Historical Depth to Water Measurements
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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	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)	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
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

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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	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			02-301		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
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			02-302		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

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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			02-451		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			02-452		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			02-453		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			02-455		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			02-461		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			02-463		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

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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		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
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			02-475		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			02-479		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			02-489		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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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

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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	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
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

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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	08/07/2002	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
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

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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	09/20/2002	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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	816	02-816	MW	06/25/2001	10.83	Product Not Found	0	2.03

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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	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

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Summary of Historical Depth to Water Measurements
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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	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
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

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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	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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	06/16/2001	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
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

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Summary of Historical Depth to Water Measurements
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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	08/01/2001	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
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

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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	09/14/2001	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
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

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Summary of Historical Depth to Water Measurements
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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	10/29/2001	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

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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	06/05/2002	9.12	Product Not Found	0	2.43
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

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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	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
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

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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	09/02/2002	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
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

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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	10/17/2002	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
NMCB, UST T-1416-A	NMCB	818	02-818	MW	09/07/2004	9.63	Mix Sheen	0.01	1.92

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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	09/10/2004	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	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

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Summary of Historical Depth to Water Measurements
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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	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			E-201		9/25/2006	13.54	Product Not Found	0	2.00
NMCB, UST T-1416-A			E-201		9/18/2007	12.74	Product Not Found	0	2.80
NMCB, UST T-1416-A			E-201		9/24/2008	13.54	Product Not Found	0	2.00
NMCB, UST T-1416-A			E-201		9/16/2009	13.28	Product Not Found	0	2.26
NMCB, UST T-1416-A			E-201		9/11/2010	13.64	Product Not Found	0	1.90
NMCB, UST T-1416-A			E-201		9/7/2011	13.55	Product Not Found	0	1.99
NMCB, UST T-1416-A			E-201		8/28/2012	13.55	Product Not Found	0	1.99
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	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

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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	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-07		9/25/2006	9.42		0.14	2.43
NMCB, UST T-1416-A			NMCB-07		9/19/2007	10.83	GRO	0.31	2.02
NMCB, UST T-1416-A			NMCB-07		9/24/2008	9.97	GRO	0.06	1.88
NMCB, UST T-1416-A			NMCB-07		9/15/2009	9.26	GRO	0.24	2.59
NMCB, UST T-1416-A			NMCB-07		9/11/2010	9.68	GRO	0.56	2.17
NMCB, UST T-1416-A			NMCB-07		9/7/2011	10.15	GRO	0.06	1.70
NMCB, UST T-1416-A			NMCB-07		8/28/2012	10.26	GRO	0.37	1.59
NMCB, UST T-1416-A			NMCB-08		9/27/2006	5.90	Product Not Found	0	2.62
NMCB, UST T-1416-A			NMCB-08		9/17/2007	5.43	Product Not Found	0	3.09
NMCB, UST T-1416-A			NMCB-08		9/24/2008	6.04	Product Not Found	0	2.48
NMCB, UST T-1416-A			NMCB-08		9/16/2009	6.18	Product Not Found	0	2.34
NMCB, UST T-1416-A			NMCB-08		9/11/2010	8.16	Product Not Found	TRACE	0.36
NMCB, UST T-1416-A			NMCB-08		9/11/2010	6.70	Product Not Found	0	1.82
NMCB, UST T-1416-A			NMCB-08		8/28/2012	9.65	Product Not Found	0	-1.13
NMCB, UST T-1416-A			NMCB-09		9/25/2006	9.33	Product Not Found	0	2.63
NMCB, UST T-1416-A			NMCB-09		9/15/2007	9.17	Product Not Found	0	2.79
NMCB, UST T-1416-A			NMCB-09		9/24/2008	9.92	Product Not Found	0	2.04
NMCB, UST T-1416-A			NMCB-09		9/16/2009	9.54	DRO	0.01	2.42
NMCB, UST T-1416-A			NMCB-09		9/10/2010	9.80	DRO	0.01	2.16
NMCB, UST T-1416-A			NMCB-09		9/7/2011	9.91	Product Not Found	0	2.05
NMCB, UST T-1416-A			NMCB-09		8/28/2012	10.09	Product Not Found	0	1.87
NMCB, UST T-1416-A			NMCB-10		9/25/2006	10.22	Product Not Found	0	2.73
NMCB, UST T-1416-A			NMCB-10		9/17/2007	9.47	GRO	0.01	3.48
NMCB, UST T-1416-A			NMCB-10		9/24/2008	10.97	Product Not Found	0	1.98
NMCB, UST T-1416-A			NMCB-10		9/16/2009	10.32	DRO	0.02	2.63
NMCB, UST T-1416-A			NMCB-10		9/10/2010	10.80	DRO	0.34	2.15
NMCB, UST T-1416-A			NMCB-10		9/7/2011	11.04	Product Not Found	0	1.91
NMCB, UST T-1416-A			NMCB-10		8/28/2012	11.24	DRO	0.21	1.71
NMCB, UST T-1416-A			NMCB-11		9/25/2006	7.49	Product Not Found	0	4.56
NMCB, UST T-1416-A			NMCB-11		9/14/2007	8.94	GRO	0.02	3.11
NMCB, UST T-1416-A			NMCB-11		9/24/2008	9.89	Product Not Found	0	2.16
NMCB, UST T-1416-A			NMCB-11		9/15/2009	9.09	Product Not Found	0	2.96
NMCB, UST T-1416-A			NMCB-11		9/10/2010	9.99	Product Not Found	0	2.06
NMCB, UST T-1416-A			NMCB-11		9/7/2011	9.96	Product Not Found	0	2.09
NMCB, UST T-1416-A			NMCB-11		8/28/2012	9.87	GRO	0.01	2.18
NMCB, UST T-1416-A			NMCB-12		9/25/2006	13.70	Product Not Found	0	2.57

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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-12		9/14/2007	13.48	Product Not Found	0	2.79
NMCB, UST T-1416-A			NMCB-12		9/24/2008	14.41	Product Not Found	0	1.86
NMCB, UST T-1416-A			NMCB-12		9/15/2009	13.68	Product Not Found	0	2.59
NMCB, UST T-1416-A			NMCB-12		9/10/2010	14.07	Product Not Found	0	2.20
NMCB, UST T-1416-A			NMCB-12		9/7/2011	14.35	Product Not Found	0	1.92
NMCB, UST T-1416-A			NMCB-12		8/28/2012	14.54	Product Not Found	0	1.73
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
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)	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

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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	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 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	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

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 (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

Appendix D-2
Summary of Historical Depth to Water Measurements
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Former Naval Complex, Adak, Alaska

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-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
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			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			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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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 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, 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
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	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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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	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	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
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	801	04-801	MW	10/08/2001	21.10	Product Not Found	0	6.66

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Summary of Historical Depth to Water Measurements
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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	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
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
South of Runway 18-36 Area	S-RWAY	231	02-231	MW	10/10/2001	13.60	Product Not Found	0	2.99

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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

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Summary of Historical Depth to Water Measurements
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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	09/09/2004	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
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	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

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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	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
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

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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	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

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	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	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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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	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

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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	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
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		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

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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	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
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

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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	07/20/2001	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
South of Runway 18-36 Area	TFA	139	E-216	MW	09/01/2001	16.07	Diesel Sheen	0.01	2.61

Appendix D-2
Summary of Historical Depth to Water Measurements
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Former Naval Complex, Adak, Alaska

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	09/03/2001	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

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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	10/17/2001	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
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

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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	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
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

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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	07/08/2002	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
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

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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	08/21/2002	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	10/04/2002	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
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

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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	08/08/2004	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
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

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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	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		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	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
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

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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	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

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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	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
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-18/36-04	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-18/36-05	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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			RW-18/36-05	RW	8/27/2012	9.36	Product Not Found	0	2.03
South of Runway 18-36 Area			RW-18/36-06	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
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		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
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

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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 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	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
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 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

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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 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 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
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

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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	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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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

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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	06/15/2001	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
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

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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	07/31/2001	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
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

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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	09/13/2001	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

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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	10/26/2001	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
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

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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	06/01/2002	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
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

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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	07/16/2002	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
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

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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	08/29/2002	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

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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	10/19/2002	2.30	Product Not Found	0	11.13
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	05/14/2001	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
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

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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	07/06/2001	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
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

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Summary of Historical Depth to Water Measurements
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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	08/20/2001	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
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

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Summary of Historical Depth to Water Measurements
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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	10/04/2001	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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

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	05/13/2002	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
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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	06/26/2002	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	08/09/2002	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
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

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Summary of Historical Depth to Water Measurements
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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	09/30/2002	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	10/14/2003	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
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	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 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

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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	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
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

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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	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
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

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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	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

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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	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
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	8/1/2911	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

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Summary of Historical Depth to Water Measurements
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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	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			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			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			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
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	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

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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	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		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	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
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	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

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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	200	TFB-MW4B		9/5/2012	4.62	Product Not Found	0	32.82
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	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	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
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

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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	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	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	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

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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	09/01/2001	30.06			3.63
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	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	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

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Summary of Historical Depth to Water Measurements
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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	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
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	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

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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	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
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	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

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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	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
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

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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			03-778		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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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		9/22/2007	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
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	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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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+I7853	3.14
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

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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	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
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

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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	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	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

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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		9/10/2012	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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-303-2		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
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	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	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

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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	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
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	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

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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	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	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	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
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

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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	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	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	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				

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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	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
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			MW-139-2		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			MW-146-1		9/24/2007	17.71	Product Not Found	0	17.71
SWMU 62, New Housing Fuel Leak			MW-146-1		9/22/2008	17.50	Product Not Found	0	6.92
SWMU 62, New Housing Fuel Leak			MW-146-1		9/4/2009	16.77	Product Not Found	0	7.65
SWMU 62, New Housing Fuel Leak			MW-146-1		9/13/2010	17.50	Product Not Found	0	6.92
SWMU 62, New Housing Fuel Leak			MW-146-1		9/12/2011	16.95	Product Not Found	0	7.47
SWMU 62, New Housing Fuel Leak			MW-146-1		9/8/2012	17.12	Product Not Found	0	7.30
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

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Summary of Historical Depth to Water Measurements
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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	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
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			MW-187-1		9/19/2007	20.30	Product Not Found	0	7.16
SWMU 62, New Housing Fuel Leak			MW-187-1		9/22/2008	19.31	Product Not Found	0	7.55
SWMU 62, New Housing Fuel Leak			MW-187-1		9/4/2009	18.75	Product Not Found	0	8.11
SWMU 62, New Housing Fuel Leak			MW-187-1		9/13/2010	19.53	Product Not Found	0	7.33
SWMU 62, New Housing Fuel Leak			MW-187-1		9/12/2011	19.05	Product Not Found	0	7.81
SWMU 62, New Housing Fuel Leak			MW-187-1		9/8/2012	19.05	Product Not Found	0	7.81
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

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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			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		9/10/2012	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
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

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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	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		9/10/2012	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
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

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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			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			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		9/10/2012	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			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		9/10/2012	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	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

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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	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
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	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

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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	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	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	Diesel	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
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

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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-303-9		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
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

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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	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	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
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

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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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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	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
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

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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	08/31/2004	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	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
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

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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	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	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

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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	08/13/2004	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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Former Naval Complex, Adak, Alaska

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	06/02/2001	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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

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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	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

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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	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
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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

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	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	08/30/2001	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

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Summary of Historical Depth to Water Measurements
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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

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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	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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Former Naval Complex, Adak, Alaska

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	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	06/28/2001	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
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

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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	08/11/2001	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

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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	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
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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	08/26/2004	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
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

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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	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
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

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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	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

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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	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
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	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

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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	313	04-313	RW	8/31/2012	6.97	Product Not Found	0	4.38
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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

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	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
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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

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	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	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

Appendix D-2
Summary of Historical Depth to Water Measurements
TO 055 Groundwater Monitoring Report
Former Naval Complex, Adak, Alaska

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	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	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		9/14/2006	7.65		0	2.76
Tanker Shed, UST 42494	E-RWAY	644	TS-04		9/11/2007	6.73	Product Not Found	0	3.68
Tanker Shed, UST 42494	E-RWAY	644	TS-04		9/17/2008	7.35	Product Not Found	0	3.06
Tanker Shed, UST 42494	E-RWAY	644	TS-04		9/3/2009	6.99	Product Not Found	0	3.42
Tanker Shed, UST 42494	E-RWAY	644	TS-04		9/2/2010	7.36	Product Not Found	0	3.05
Tanker Shed, UST 42494	E-RWAY	644	TS-04		8/30/2011	7.07	Product Not Found	0	3.34
Tanker Shed, UST 42494	E-RWAY	644	TS-04		8/31/2012	7.11	Product Not Found	0	3.30
Tanker Shed, UST 42494	E-RWAY		TS-05		9/19/2006	9.52		0	1.93
Tanker Shed, UST 42494	E-RWAY		TS-05		9/10/2007	8.45	Product Not Found	0	3.00
Tanker Shed, UST 42494	E-RWAY		TS-05		9/17/2008	9.31	Product Not Found	0	2.14
Tanker Shed, UST 42494	E-RWAY		TS-05		9/3/2009	9.31	Product Not Found	0	2.14
Tanker Shed, UST 42494	E-RWAY		TS-05		9/2/2010	9.40	Product Not Found	0	2.05

APPENDIX E

2012 WELL MAINTENANCE AND REPAIR LIST

TO 55 Adak LTM 2012
2011/2012 Well Maintenance and Repair List
Updated August 27 - September 11, 2012
Report Date: September 25, 2012

Site	Well ID	Damage Description	Recommended Repair
Former Power Plant T-1451	01-118	Stripped bolts on monument.	Replace 9/16" flush-mount bolts.
	01-150	Cracked collar on monument.	Repair/replace monument rim/collar.
GCI Compound, UST GC-1	04-100	Cracked collar on monument.	Repair/replace monument rim/collar.
	04-204	Cracked collar on monument.	Repair/replace monument rim/collar.
	04-210	Two stripped bolts on monument.	Replace two 9/16" flush-mount bolts.
	04-211	Monument fills with water.	Repair monument.
	04-213	Stripped bolts on monument. 2-in. cap needs replacement.	Replace 9/16" flush-mount bolts and cap.
	04-701	One damaged bollard (out of four). Particulate seen throughout sampling.	Repair, install bollard. Redevelop well to remove sedimentation.
Housing Area (Arctic Acres)	03-421*	Cracked collar on monument.	Repair/replace monument rim/collar.
	03-422*	Cracked collar on monument.	Repair/replace monument rim/collar.
NMCB Building T-1416 Expanded Area	02-301	Monument lid has been replaced by an 8" non-locking J-Plug.	Replace monument lid.
	02-451	Cracked lid on monument.	Repair/replace monument lid.
	02-455	Cracked and crumbling collar on monument, lid difficult to open.	Repair/replace monument rim/collar/lid.
	02-461	Missing both 9/16" flush-mount bolts. Vault keeps filling with water.	Replace 9/16" flush-mount bolts and monument lid, reseal vault.
	02-463	Cracked collar on monument.	Repair/replace monument rim/collar.
	02-478	Missing three 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolts.
	02-497	Two 9/16" flush-mount bolts broken (out of 2).	Replace 9/16" flush-mount bolts.
	02-813*	Cracked collar on monument.	Repair/replace monument rim/collar.
	02-816	Cracked collar on monument.	Repair/replace monument rim/collar.
	02-817	Broken monument collar.	Repair/replace monument rim/collar.
	02-819	Stripped bolts on monument.	Replace 9/16" flush-mount bolts.
	NMCB-04	Monument is heavily rusted, difficult to open, fills with water.	Repair monument.
	NMCB-05	Missing one (of 2) 1/2" flush-mount bolt.	Replace 1/2" flush-mount bolts.
	NMCB-09	Cracked collar on monument.	Repair/replace monument rim/collar.

TO 55 Adak LTM 2012
2011/2012 Well Maintenance and Repair List
Updated August 27 - September 11, 2012
Report Date: September 25, 2012

Site	Well ID	Damage Description	Recommended Repair
NMCB (continued)	NMCB-10	Cracked collar on monument.	Repair/replace monument rim/collar.
	NMCB-11	Cracked collar on monument.	Repair/replace monument rim/collar.
SA 78, Old Transportation Bldg.	MW-116	Monument very rusty.	Replace monument.
SA 79, Main Road Pipeline, South End	02-230	Cracked collar on monument.	Repair/replace monument rim/collar.
	MRP-MW8	Monument lid is missing, slip cap is black 2" PVC.	Repair/replace monument rim/collar.
SA 80, Steam Plant 4 (UST 27089 and 27090)	04-155	Stripped bolts (3) on monument	Replace 9/16" flush-mount bolts
	04-164	Cracked concrete base.	Repair monument base.
	04-173	Stripped bolts (2) on monument	Replace 9/16" flush-mount bolts
	SP4-2	One bolt stripped, one missing, on monument. Monument cover cracked, fills with water.	Replace 9/16" flush-mount bolts. Replace cover.
	SP4-3	Monument is heavily rusted.	Assess monument for replacement.
South of Runway 18-36 Area	02-231	Broken monument rim/collar and lid.	Replace monument rim/collar and lid.
	02-232	Cracked collar on monument.	Replace monument rim/collar.
	02-518	Cap damaged and non-locking. No well protection.	Replace cap with 2" diameter lockable type. Recommend installing bollards for well protection.
	18/36-05*	Monument collar is cracked.	Replace monument rim/collar.
	28-804*	Missing 1/2" diameter cap on casing.	Replace 1/2" diameter PVC cap.
	28-812*	Missing 1/4" diameter cap on casing.	Replace 1/4" diameter PVC cap.
	AS-1	Cover seal faulty, fills with water.	Replace monument lid/seal.
	E-208*	Monument top and lid rusted through.	Replace monument and lid.
	E-216	Top of casing is broken.	Cut off casing if J-plug won't seal.
	E-217	Cracked concrete pad.	Repair concrete pad.
	RW-18/36-04	Stripped bolts on monument.	Replace 9/16" flush-mount bolts.
	RW-18/36-06*	Bolts do not fit flush mount cover.	Replace bolts.
	Z2-4*	No lockable cap. No well protection.	Replace cap with 2" diameter lockable type. Recommend installing bollards for well protection.
	Z3-2	No lockable cap. No well protection.	Replace cap with 2" diameter lockable type. Recommend installing bollards for well protection.

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Site	**Well ID**	**Damage Description**	**Recommended Repair**
South of Runway 18/36 (continued)	Z4-2	Casing bent over 15 degrees, no lockable cap. No well protection.	Install protective bollards or assess if frost heave damage is occurring; replace with 2" lockable cap.
SWMU 14, Old Pesticide Storage and Disposal Area	01-153	Monument collar is cracked, lid is missing.	Replace monument rim/collar/lid.
	MW14-5	One (of 3) 9/16" bolt stripped.	Replace 9/16" bolt.
SWMU 15, Future Jobs/Defense Reutilization Marketing Office	MW15-3	Flush-mount monument lid missing. No well protection.	Replace monument lid (unusual lid type, possibly threaded). Recommend installing bollards for well protection.
	MW15-424	Cracked and corroded collar on monument.	Repair/replace monument rim/collar.
SWMU 17, Power Plant No. 3	05-375	Monument rim is cracked.	Replace monument rim/collar.
	HC-1*	Missing three 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolts.
	HC-2*	Monument lid broken; stick up riser monument is flush with ground surface. 8" J plug in use for monument lid. No well protection.	Repair monument lid or replace monument with flush mount. Recommend installing bollards for well protection.
	HC-3*	Monument lid broken; stick up riser monument is flush with ground surface. 8" J plug in use for monument lid. No well protection.	Repair monument lid or replace monument with flush mount. Recommend installing bollards for well protection.
	PP-05	Lid is rusted and hard to open.	Repair/replace lid.
SWMU 55, Public Transportation Dept. Waste Storage Area	55-145*	Monument rim broken.	Repair/replace monument rim/collar.
	55-146*	Monument rim broken.	Repair/replace monument rim/collar.
SWMU 58 and SA 73, Heating Plant 6	12-106	Monument rim broken/concrete pad broken.	Repair/replace monument rim/collar and repair concrete pad.
	12-108*	No monument on 1/2" diameter piezometer. No well protection.	Install stick-up monument and bollards
	12-110*	No monument on 1/2" diameter piezometer. No well protection.	Install stick-up monument and bollards for well protection.
	12-114	Monument rim broken.	Repair/replace monument rim/collar.
	12-124*	Bullet hole in monument.	No applicable repair.
	12-201*	No monument on 1/2" diameter piezometer. No well protection.	Install stick-up monument and bollards for well protection.

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Site	**Well ID**	**Damage Description**	**Recommended Repair**
SWMU 58 and SA 73, Heating Plant 6 (continued)	12-202*	No monument on 1/2" diameter piezometer. No well protection.	Install stick-up monument and bollards for well protection.
	12-610	Monument collar broken.	Repair/replace monument rim/collar.
SWMU 60, Tank Farm A	LC5A	Monument lid missing (stick up). Casing sticks up above monument top.	Replace stick-up monument lid. Cut casing if required.
	650	Concrete pad pushed up out of ground. Bentonite pushed up around cap.	Repair concrete pad and monument.
	651	Concrete pad pushed up out of ground. Bentonite pushed up around cap.	Repair concrete pad and monument.
	652	Concrete pad loose.	Repair concrete pad.
SWMU 61, Tank Farm B	14-113	Well casing has tilted from vertical. Slow recharge and high turbidity.	Repair/replace monument. Redevelop well to remove sediment.
	14-210	Slow recharge and total depth decreased by two feet in one year (2009-2010).	Redevelop well to remove sediment.
SWMU 62, Sandy Cove	03-619	Missing 1 (of 2) 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolt.
	03-696*	Stripped bolts on monument, bentonite inside vault, water around casing.	Repair monument collar, assess if concrete seal is compromised.
	03-697*	Broken monument collar.	Repair/replace monument rim/collar.
	03-802	Cover seal faulty, fills with water/one 9/16" bolt broken.	Replace monument lid/seal/replace bolt.
	CT-102-2*	Three flush-mount bolts missing, unknown size. Well had been incorrectly marked as MW-102-4. Remarked in the field.	Replace flush-mount bolts.
	HMW-102-1	Stripped bolts on monument.	Replace 9/16" flush-mount bolts.
	HMW-107-2*	Two (of 3) 9/16" flush-mount bolts stripped.	Replace 9/16" flush-mount bolts.
	HMW-139-2*	Stripped bolts on monument.	Replace 9/16" flush-mount bolts.
	HMW-146-1	Stripped bolts on monument.	Replace 9/16" flush-mount bolts.
	HMW-146-3	Monument lid doesn't seal well/two-9/16" bolts stripped.	Repair/replace monument/bolts.
	MRP-MW2	Casing bent about two feet down. Difficult to monitor and sample. Thick precipitate in water.	Repair/remove blockage. Redevelop well.
	MW-107-11*	No monument - 2" diameter PVC stickup is located in a residential yard and has been damaged by mowing.	Install flush-mount monument.

TO 55 Adak LTM 2012
2011/2012 Well Maintenance and Repair List
Updated August 27 - September 11, 2012
Report Date: September 25, 2012

Site	Well ID	Damage Description	Recommended Repair
SWMU 62, Sandy Cove (continued)	MW-134-10	No monument - 2" diameter PVC stickup.	Install flush-mount monument.
	MW-134-11	Stripped bolts on monument.	Replace 9/16" flush-mount bolts.
	RW-102-4	Missing three 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolts.
SWMU 62, Eagle Bay Housing Complex	03-101	Missing three 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolts.
	03-502	Missing 1/2" diameter cap on casing.	Replace 1/2" PVC cap.
	HMW-303-11	Missing three 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolts.
	HMW-303-12	Missing three 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolts.
	RW-303-4	Missing 3 bolts for lid/missing 8" slip cap.	Replace 3 unknown size bolts/cap.
	RW-303-6	Missing 3 bolts for lid.	Replace 3 unknown size bolts.
	RW-303-7	Missing 3 unknown size bolts/recovery pump prohibits placement of 6" slip cap.	Replace 3 unknown size bolts/remove recovery system.
	RW-303-9	Missing three 9/16" flush-mount bolts/recovery pump prohibits placement of 6" slip cap.	Replace 9/16" flush-mount bolts/remove recovery system.
	RW-303-11*	Missing three 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolts.
	RW-303-12*	Missing three 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolts.
Tanker Shed, UST 42494	04-175	Stripped bolt (1) on monument.	Replace 9/16" flush-mount bolt.
	04-176	Stripped bolts (3) on monument.	Replace 9/16" flush-mount bolts.
	04-178	Stripped bolts (2) on monument, fills with water.	Replace 9/16" flush-mount bolts, lid seal.
	04-290	One (of 2) 9/16" flush-mount bolts bent.	Replace 9/16" flush-mount bolts.
	04-301	Stripped bolts (2) on monument.	Replace 9/16" flush-mount bolts
	04-302	Missing two (of 2) 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolts.
	04-303	Stripped bolts (2) on monument.	Replace 9/16" flush-mount bolts.
	04-304	Stripped bolts (2) on monument.	Replace 9/16" flush-mount bolts.
	04-307	Missing one (of 2) 9/16" flush-mount bolts.	Replace 9/16" flush-mount bolts.
	04-309	Broken bolts on monument.	Replace 9/16" flush-mount bolts.
	04-310	Flush-mount monument/lid and concrete have been broken in pieces.	Replace monument/lid/and concrete seal.

TO 55 Adak LTM 2012
2011/2012 Well Maintenance and Repair List
Updated August 27 - September 11, 2012
Report Date: September 25, 2012

Site	Well ID	Damage Description	Recommended Repair
Tanker Shed (continured)	04-313	Stripped bolts on monument.	Replace 9/16" flush-mount bolt.
	04-314	Stripped bolt on monument.	Replace 9/16" flush-mount bolts.
	04-317	Missing one (of 2) 9/16" flush-mount bolts/collar cracked.	Replace 9/16" flush-mount bolts/monument collar.
	TS-01*	Cracked collar on monument.	Replace monument rim/collar.
	TS-03	No bolts; broken flush-mount bolt holes.	Replace flush-mount monument.
	TS-04	Bentonite expansion up through concrete monument, concrete appears depressed, well depth increased.	Replace flush-mount monument.
SWMU 25, Roberts Landfill	A-2*	Concrete pad disintegrating.	Repair well pad.
	A-3*	Slow recharge and turbid conditions.	Redevelop well.
	A-5*	Sedimentation and turbid conditions, and well pad crumbling.	Redevelop well and repair well pad.
	B-1*	Monument lid won't lock. Casing either has surged up or the monument has sunk.	Cut off well casing or repair monument.
General Protection for Monitoring Well Network	All LTM Wells	There are a total of 161 wells, both flush-mount and stick-up, that do not have protective bollards installed. Further on-site assessment needs to be performed to determine if bollards should be installed.	Assessment would include discussions with the City, Airport, and residents. Bollard installation for wells in residential yards may not be appropriate. Flush mount in-town wells may not require bollards or bollard installation may cause interference with City and Airport functions. Remote wells may not require bollard installation.

Notes: * indicates well was inspected in 2010/11 but not in 2012.

APPENDIX F

2012 DATA VALIDATION REPORTS AND LABORATORY ANALYTICAL DATA

Laboratory Data Consultants, Inc.

7750 El Camino Real, Ste. 2L Carlsbad, CA 92009

Phone 760.634.0437 **Web** www.lab-data.com **Fax** 760.634.0439

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

October 16, 2012

SUBJECT: ADAK LTM 2012, 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 19, 2012. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 28491:

SDG #	Fraction
K1208651	Benzene, 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,

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

EDD Level IV

LDC #28491 (Sealaska-Poulsbo, WA / Adak LTM 2012)

LDC	SDG#	DATE REC'D	(3) DATE DUE	Benzene (8260C)		GRO (AK101)		DRO (AK102)																													
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
A	K1208651	09/28/12	10/19/12	0	2	0	2	0	1																												
Total	A/LR			0	2	0	2	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	5

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not inclute MS/MSD, and DUPs

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 29, 2012

LDC Report Date: October 15, 2012

Matrix: Soil

Parameters: Benzene

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208651

Sample Identification

TB082912B
NL-05S-2012
NL-05S-2012MS
NL-05S-2012MSD

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260C for Benzene.

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% 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 benzene contaminants were found in the method blanks.

Sample TB082912B was identified as a trip blank. No benzene 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) 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Benzene - Data Qualification Summary - SDG K1208651

No Sample Data Qualified in this SDG

Adak LTM 2012
Benzene - Laboratory Blank Data Qualification Summary - SDG K1208651

No Sample Data Qualified in this SDG

Adak LTM 2012
Benzene - Field Blank Data Qualification Summary - SDG K1208651

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208651
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Soil	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	TB082912B	**Units:**	mg/Kg
Lab Code:	K1208651-001	**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	09/06/12	09/06/12	KWG1210297	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	91	68-119	09/06/12	Acceptable
1,2-Dichloroethane-d4	90	64-142	09/06/12	Acceptable
Toluene-d8	99	85-115	09/06/12	Acceptable
4-Bromofluorobenzene	112	85-120	09/06/12	Acceptable

9/10/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208651
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Soil	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	NL-05S-2012	**Units:**	mg/Kg
Lab Code:	K1208651-002	**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	0.073	0.015	0.0091	1	09/06/12	09/06/12	KWG1210297	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	68-119	09/06/12	Acceptable
1,2-Dichloroethane-d4	93	64-142	09/06/12	Acceptable
Toluene-d8	100	85-115	09/06/12	Acceptable
4-Bromofluorobenzene	106	85-120	09/06/12	Acceptable

10/15/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2012
Collection Date:	August 29, 2012
LDC Report Date:	October 11, 2012
Matrix:	Soil
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1208651

Sample Identification

TB082912B
NL-05S-2012
NL-05S-2012MS
NL-05S-2012MSD

Introduction

This data review covers 4 soil 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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 TB082912B was identified as a trip blank. No gasoline range organic contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB082912B	8/29/12	Gasoline range organics (C6-C10)	2.2 mg/Kg	NL-05S-2012

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Gasoline Range Organics - Data Qualification Summary - SDG K1208651

No Sample Data Qualified in this SDG

Adak LTM 2012
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208651

No Sample Data Qualified in this SDG

Adak LTM 2010
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1208651

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208651
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Soil	**Date Received:**	08/31/2012

Gasoline Range Organics

Sample Name:	TB082912B	**Units:**	mg/Kg
Lab Code:	K1208651-001	**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	**2.2**	J	5.0	2.5	1.5	1	08/29/12	09/10/12	KWG1210490	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	73	50-150	09/10/12	Acceptable

10/15/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Soil

Service Request: K1208651
Date Collected: 08/29/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: NL-05S-2012
Lab Code: K1208651-002

Extraction Method: EPA 5035A/5030B
Analysis Method: AK101

Units: mg/Kg
Basis: Dry
Level: Med

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	5.4	2.7	1.7	1	08/29/12	09/10/12	KWG1210490	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	71	50-150	09/10/12	Acceptable

10/15/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2012
Collection Date:	August 29, 2012
LDC Report Date:	October 11, 2012
Matrix:	Soil
Parameters:	Diesel Range Organics
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1208651

Sample Identification

NL-05S-2012
NL-05S-2012MS
NL-05S-2012MSD

Introduction

This data review covers 3 soil 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Diesel Range Organics - Data Qualification Summary - SDG K1208651

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208651

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1208651

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208651
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Soil	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	NL-05S-2012	**Units:**	mg/Kg
Lab Code:	K1208651-002	**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	59	Y	22	3.7	1.5	1	09/10/12	09/14/12	KWG1210331	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	85	50-150	09/14/12	Acceptable

10/15/12

Comments:

Laboratory Data Consultants, Inc.

7750 El Camino Real, Ste. 2L Carlsbad, CA 92009

Phone 760.634.0437 **Web** www.lab-data.com **Fax** 760.634.0439

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

October 16, 2012

SUBJECT: ADAK LTM 2012, 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 1, 2012. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 28501:

SDG #	Fraction
K1208972	Volatiles 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,

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

EDD Level IV

LDC #28501 (Sealaska-Poulsbo, WA / Adak LTM 2012)

LDC	SDG#	DATE REC'D	(3) DATE DUE	BTEX (8260C)		DRO (AK102)																															
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
A	K1208972	10/01/12	10/22/12	4	0	4	0																														
Total	A/LR			4	0	4	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	8

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not inclute MS/MSD, and DUPs

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 7, 2012

LDC Report Date: October 14, 2012

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208972

Sample Identification

TB090712B
08-202-2012
08-200-2012
08-175-2012

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 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%.

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 TB090712B was identified as a trip blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB090712B	9/7/12	Toluene	0.24 ug/L	No associated samples 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) 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Volatiles - Data Qualification Summary - SDG K1208972

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1208972

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Field Blank Data Qualification Summary - SDG K1208972

No Sample Data Qualified in this SDG

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208972
Date Collected: 09/07/2012
Date Received: 09/10/2012

Volatile Organic Compounds

Sample Name: TB090712B
Lab Code: K1208972-001

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	09/18/12	09/18/12	KWG1210913	
Toluene	**0.24**	J	0.50	0.10	0.054	1	09/18/12	09/18/12	KWG1210913	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/18/12	09/18/12	KWG1210913	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/18/12	09/18/12	KWG1210913	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/18/12	09/18/12	KWG1210913	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	103	70-120	09/18/12	Acceptable
Dibromofluoromethane	107	85-115	09/18/12	Acceptable
Toluene-d8	116	85-120	09/18/12	Acceptable
4-Bromofluorobenzene	105	75-120	09/18/12	Acceptable

9/10/18/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208972
Date Collected: 09/07/2012
Date Received: 09/10/2012

Volatile Organic Compounds

Sample Name: 08-202-2012
Lab Code: K1208972-002

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	9.6		0.50	0.10	0.062	1	09/18/12	09/18/12	KWG1210913	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	70-120	09/18/12	Acceptable
Dibromofluoromethane	107	85-115	09/18/12	Acceptable
Toluene-d8	116	85-120	09/18/12	Acceptable
4-Bromofluorobenzene	105	75-120	09/18/12	Acceptable

10/1/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208972
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/07/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Volatile Organic Compounds

Sample Name:	08-200-2012	**Units:**	ug/L
Lab Code:	K1208972-003	**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	**280**	D	5.0	1.0	0.62	10	09/19/12	09/19/12	KWG1210989	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	70-120	09/19/12	Acceptable
Dibromofluoromethane	92	85-115	09/19/12	Acceptable
Toluene-d8	98	85-120	09/19/12	Acceptable
4-Bromofluorobenzene	92	75-120	09/19/12	Acceptable

10/10/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208972
Date Collected: 09/07/2012
Date Received: 09/10/2012

Volatile Organic Compounds

Sample Name: 08-175-2012
Lab Code: K1208972-004

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	**0.11**	J	0.50	0.10	0.062	1	09/18/12	09/18/12	KWG1210913	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	103	70-120	09/18/12	Acceptable
Dibromofluoromethane	108	85-115	09/18/12	Acceptable
Toluene-d8	115	85-120	09/18/12	Acceptable
4-Bromofluorobenzene	106	75-120	09/18/12	Acceptable

10/5/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 7, 2012

LDC Report Date: October 15, 2012

Matrix: Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208972

Sample Identification

MW-134-11-2012
MW-187-1-2012
03-155-2012
03-619-2012
03-619-2012MS
03-619-2012MSD

Introduction

This data review covers 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Diesel Range Organics - Data Qualification Summary - SDG K1208972

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208972

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1208972

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208972
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/07/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Diesel Range Organics

Sample Name:	MW-134-11-2012	**Units:**	ug/L
Lab Code:	K1208972-005	**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	**7100**	Y	49	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	94	50-150	09/20/12	Acceptable

9/10/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208972
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/07/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Diesel Range Organics

Sample Name:	MW-187-1-2012	**Units:**	ug/L
Lab Code:	K1208972-006	**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	**2300**	Y	49	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	73	50-150	09/20/12	Acceptable

9/10/15/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208972
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/08/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Diesel Range Organics

Sample Name:	03-155-2012	**Units:**	ug/L
Lab Code:	K1208972-007	**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	**2500**	Y	49	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	75	50-150	09/20/12	Acceptable

10/15/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208972
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/08/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Diesel Range Organics

Sample Name:	03-619-2012	**Units:**	ug/L
Lab Code:	K1208972-008	**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	**430**	Y	50	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	78	50-150	09/20/12	Acceptable

9/10/15/12

Comments:

Laboratory Data Consultants, Inc.

7750 El Camino Real, Ste. 2L Carlsbad, CA 92009

Phone 760.634.0437 **Web** www.lab-data.com **Fax** 760.634.0439

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 2, 2012

SUBJECT: Revised ADAK LTM 2012, Data Validation

Dear Ms. Wunderlich,

Enclosed are the revised data validation reports for the fractions listed below. Please replace the previously submitted reports with the enclosed revised reports.

LDC Project # 28538:

SDG #	Fraction
K1208922 K1209207	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,

ERauto

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

EDD Level IV

LDC #28538 (Sealaska-Poulsbo, WA / Adak LTM 2012)

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (8260C)		PAH (8270D-SIM)		GRO (AK101)		DRO (AK102)																													
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	K1208922	10/05/12	10/26/12	8	0	6	0	9	0	10	0																												
B	K1209207	10/05/12	10/26/12	3	2	1	1	2	2	8	1																												
Total	A/LR			11	2	7	1	11	2	18	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	53

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not inclute MS/MSD, and DUPs

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 5 through September 6, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208922

Sample Identification

TB090512A
MW-E006-2012
653-2012
LC5A-2012
652-2012
651-2012
650-2012
14-113-2012
652-2012MS
652-2012MSD

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 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 with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Analysis	Required Holding Time (in Days) From Sample Collection Until Analysis	Flag	A or P
14-113-2012	All TCL compounds	15	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% 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 TB090512A was identified as a trip blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB090512A	9/5/12	Toluene	0.26 ug/L	MW-E006-2012 653-2012 LC5A-2012 652-2012 651-2012 650-2012 14-113-2012

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
653-2012	Toluene	0.41 ug/L	0.50U ug/L
650-2012	Toluene	0.70 ug/L	0.70U 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
LC5A-2012	Bromofluorobenzene	57 (75-120)	All TCL compounds	J (all detects) UJ (all non-detects)	A

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
652-2012MS/MSD (652-2012)	Ethylbenzene	-	70 (75-125)	-	J (all detects) UJ (all non-detects)	A
	m,p-Xylenes	-	74 (75-130)	-	J (all detects) UJ (all non-detects)	

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. 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Volatiles - Data Qualification Summary - SDG K1208922

SDG	Sample	Compound	Flag	A or P	Reason
K1208922	14-113-2012	All TCL compounds	J (all detects) UJ (all non-detects)	A	Technical holding times
K1208922	LC5A-2012	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate spikes (%R)
K1208922	652-2012	Ethylbenzene m,p-Xylenes	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)

Adak LTM 2012
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1208922

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K1208922	653-2012	Toluene	0.50U ug/L	A
K1208922	650-2012	Toluene	0.70U ug/L	A

Adak LTM 2012
Volatiles - Field Blank Data Qualification Summary - SDG K1208922

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/05/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Volatile Organic Compounds

Sample Name:	TB090512A	**Units:**	ug/L
Lab Code:	K1208922-009	**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	09/17/12	09/17/12	KWG1210839	
Toluene	**0.26**	J	0.50	0.10	0.054	1	09/17/12	09/17/12	KWG1210839	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/17/12	09/17/12	KWG1210839	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/17/12	09/17/12	KWG1210839	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/17/12	09/17/12	KWG1210839	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	70-120	09/17/12	Acceptable
Dibromofluoromethane	93	85-115	09/17/12	Acceptable
Toluene-d8	98	85-120	09/17/12	Acceptable
4-Bromofluorobenzene	91	75-120	09/17/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/05/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: MW-E006-2012
Lab Code: K1208922-010

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	4.7		0.50	0.10	0.062	1	09/17/12	09/17/12	KWG1210839	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	70-120	09/17/12	Acceptable
Dibromofluoromethane	94	85-115	09/17/12	Acceptable
Toluene-d8	98	85-120	09/17/12	Acceptable
4-Bromofluorobenzene	91	75-120	09/17/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/05/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: 653-2012
Lab Code: K1208922-011

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	U	0.50	0.10	0.062	1	09/17/12	09/17/12	KWG1210839	
Toluene	**0.41**	J	0.50	0.50	0.054	1	09/17/12	09/17/12	KWG1210839	
Ethylbenzene	**1.2**		0.50	0.10	0.050	1	09/17/12	09/17/12	KWG1210839	
m,p-Xylenes	**6.0**		0.50	0.20	0.11	1	09/17/12	09/17/12	KWG1210839	
o-Xylene	**0.18**	J	0.50	0.20	0.074	1	09/17/12	09/17/12	KWG1210839	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	87	70-120	09/17/12	Acceptable
Dibromofluoromethane	94	85-115	09/17/12	Acceptable
Toluene-d8	99	85-120	09/17/12	Acceptable
4-Bromofluorobenzene	84	75-120	09/17/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/05/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: LC5A-2012
Lab Code: K1208922-012

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	J	0.50	0.10	0.062	1	09/17/12	09/17/12	KWG1210839	
Toluene	3.0		0.50	0.10	0.054	1	09/17/12	09/17/12	KWG1210839	
Ethylbenzene	22		0.50	0.10	0.050	1	09/17/12	09/17/12	KWG1210839	
m,p-Xylenes	28		0.50	0.20	0.11	1	09/17/12	09/17/12	KWG1210839	
o-Xylene	1.2		0.50	0.20	0.074	1	09/17/12	09/17/12	KWG1210839	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	96	70-120	09/17/12	Acceptable
Dibromofluoromethane	92	85-115	09/17/12	Acceptable
Toluene-d8	100	85-120	09/17/12	Acceptable
4-Bromofluorobenzene	57	75-120	09/17/12	Outside Control Limits

10/24/12

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
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Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/05/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Volatile Organic Compounds

Sample Name:	652-2012	**Units:**	ug/L
Lab Code:	K1208922-013	**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	**4.9**			0.50	0.10	0.062	1	09/17/12	09/17/12	KWG1210839	
Toluene	**1.4**			0.50	0.10	0.054	1	09/17/12	09/17/12	KWG1210839	
Ethylbenzene	**32**	J	J	0.50	0.10	0.050	1	09/17/12	09/17/12	KWG1210839	
m,p-Xylenes	**50**	J	J	0.50	0.20	0.11	1	09/17/12	09/17/12	KWG1210839	
o-Xylene	**1.8**			0.50	0.20	0.074	1	09/17/12	09/17/12	KWG1210839	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	70-120	09/17/12	Acceptable
Dibromofluoromethane	94	85-115	09/17/12	Acceptable
Toluene-d8	100	85-120	09/17/12	Acceptable
4-Bromofluorobenzene	84	75-120	09/17/12	Acceptable

9 10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/05/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: 651-2012
Lab Code: K1208922-014

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	**2.9**		0.50	0.10	0.062	1	09/17/12	09/17/12	KWG1210839	
Toluene	**1.7**		0.50	0.10	0.054	1	09/17/12	09/17/12	KWG1210839	
Ethylbenzene	**22**		0.50	0.10	0.050	1	09/17/12	09/17/12	KWG1210839	
m,p-Xylenes	**66**		0.50	0.20	0.11	1	09/17/12	09/17/12	KWG1210839	
o-Xylene	**0.84**		0.50	0.20	0.074	1	09/17/12	09/17/12	KWG1210839	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	70-120	09/17/12	Acceptable
Dibromofluoromethane	92	85-115	09/17/12	Acceptable
Toluene-d8	99	85-120	09/17/12	Acceptable
4-Bromofluorobenzene	78	75-120	09/17/12	Acceptable

9/10/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/05/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: 650-2012
Lab Code: K1208922-015

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	**10**		0.50	0.10	0.062	1	09/17/12	09/17/12	KWG1210839	
Toluene	**0.70**	U	0.50	0.10	0.054	1	09/17/12	09/17/12	KWG1210839	
Ethylbenzene	**0.25**	J	0.50	0.10	0.050	1	09/17/12	09/17/12	KWG1210839	
m,p-Xylenes	**0.50**		0.50	0.20	0.11	1	09/17/12	09/17/12	KWG1210839	
o-Xylene	**0.11**	J	0.50	0.20	0.074	1	09/17/12	09/17/12	KWG1210839	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	87	70-120	09/17/12	Acceptable
Dibromofluoromethane	93	85-115	09/17/12	Acceptable
Toluene-d8	99	85-120	09/17/12	Acceptable
4-Bromofluorobenzene	87	75-120	09/17/12	Acceptable

9/10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/06/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: 14-113-2012
Lab Code: K1208922-016

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	**6.9**	J	0.50	0.10	0.062	1	09/18/12	09/18/12	KWG1210913	
Toluene	**2.8**		0.50	0.10	0.054	1	09/18/12	09/18/12	KWG1210913	
Ethylbenzene	**12**		0.50	0.10	0.050	1	09/18/12	09/18/12	KWG1210913	
m,p-Xylenes	**680**	D	10	4.0	2.2	20	09/21/12	09/21/12	KWG1211112	*
o-Xylene	**1.8**		0.50	0.20	0.074	1	09/18/12	09/18/12	KWG1210913	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	70-120	09/18/12	Acceptable
Dibromofluoromethane	106	85-115	09/18/12	Acceptable
Toluene-d8	119	85-120	09/18/12	Acceptable
4-Bromofluorobenzene	110	75-120	09/18/12	Acceptable

10/24/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2011

Collection Date: September 5 through September 6, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208922

Sample Identification

653-2012
LC5A-2012
652-2012
651-2012
650-2012
14-113-2012

Introduction

This data review covers 6 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 target compounds were within 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 difference (%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
KWG1210410-5	9/10/12	Naphthalene	0.0034 ug/L	All samples in SDG K1208922

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2011
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1208922

No Sample Data Qualified in this SDG

Adak LTM 2011
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1208922

No Sample Data Qualified in this SDG

Adak LTM 2011
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1208922

No Sample Data Qualified in this SDG

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/05/2012
Date Received: 09/07/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: 653-2012
Lab Code: K1208922-011

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	**1.3**		0.020	0.0050	0.0030	1	09/10/12	09/15/12	KWG1210410	
2-Methylnaphthalene	**2.1**		0.020	0.0050	0.0023	1	09/10/12	09/15/12	KWG1210410	
Acenaphthylene	ND	Ui	0.058	0.058	0.058	1	09/10/12	09/15/12	KWG1210410	
Acenaphthene	**0.25**		0.020	0.0050	0.0044	1	09/10/12	09/15/12	KWG1210410	
Fluorene	**0.88**		0.020	0.0050	0.0038	1	09/10/12	09/15/12	KWG1210410	
Phenanthrene	**0.29**		0.020	0.0050	0.0080	1	09/10/12	09/15/12	KWG1210410	
Anthracene	**0.044**		0.020	0.0050	0.0036	1	09/10/12	09/15/12	KWG1210410	
Fluoranthene	**0.065**		0.020	0.0050	0.0044	1	09/10/12	09/15/12	KWG1210410	
Pyrene	**0.052**		0.020	0.0050	0.0035	1	09/10/12	09/15/12	KWG1210410	
Benz(a)anthracene	**0.0060**	J	0.020	0.0050	0.0026	1	09/10/12	09/15/12	KWG1210410	
Chrysene	**0.0049**	J	0.020	0.0050	0.0034	1	09/10/12	09/15/12	KWG1210410	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/10/12	09/15/12	KWG1210410	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/15/12	KWG1210410	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/10/12	09/15/12	KWG1210410	
Indeno(1,2,3-cd)pyrene	**0.0035**	J	0.020	0.0050	0.0026	1	09/10/12	09/15/12	KWG1210410	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/15/12	KWG1210410	
Benzo(g,h,i)perylene	**0.0044**	J	0.020	0.0050	0.0029	1	09/10/12	09/15/12	KWG1210410	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	81	28-98	09/15/12	Acceptable
Fluoranthene-d10	95	31-105	09/15/12	Acceptable
Terphenyl-d14	99	27-112	09/15/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/05/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Polynuclear Aromatic Hydrocarbons

Sample Name:	LC5A-2012	**Units:**	ug/L
Lab Code:	K1208922-012	**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	**42**	D	0.40	0.10	0.060	20	09/10/12	09/18/12	KWG1210410	
2-Methylnaphthalene	**64**	D	0.40	0.10	0.046	20	09/10/12	09/18/12	KWG1210410	
Acenaphthylene	ND	Ui	0.38	0.38	0.38	1	09/10/12	09/17/12	KWG1210410	
Acenaphthene	**1.1**		0.020	0.0050	0.0044	1	09/10/12	09/17/12	KWG1210410	
Fluorene	**4.4**		0.020	0.0050	0.0038	1	09/10/12	09/17/12	KWG1210410	
Phenanthrene	**2.7**		0.020	0.0050	0.0080	1	09/10/12	09/17/12	KWG1210410	
Anthracene	**0.099**		0.020	0.0050	0.0036	1	09/10/12	09/17/12	KWG1210410	
Fluoranthene	**0.091**		0.020	0.0050	0.0044	1	09/10/12	09/17/12	KWG1210410	
Pyrene	**0.069**		0.020	0.0050	0.0035	1	09/10/12	09/17/12	KWG1210410	
Benz(a)anthracene	**0.0043**	J	0.020	0.0050	0.0026	1	09/10/12	09/17/12	KWG1210410	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/10/12	09/17/12	KWG1210410	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/10/12	09/17/12	KWG1210410	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/17/12	KWG1210410	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/10/12	09/17/12	KWG1210410	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/17/12	KWG1210410	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/17/12	KWG1210410	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/10/12	09/17/12	KWG1210410	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	82	28-98	09/17/12	Acceptable
Fluoranthene-d10	91	31-105	09/17/12	Acceptable
Terphenyl-d14	101	27-112	09/17/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/05/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Polynuclear Aromatic Hydrocarbons

Sample Name:	652-2012	**Units:**	ug/L
Lab Code:	K1208922-013	**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	**32**	D	0.20	0.050	0.030	10	09/10/12	09/18/12	KWG1210410	
2-Methylnaphthalene	**3.1**		0.020	0.0050	0.0023	1	09/10/12	09/17/12	KWG1210410	
Acenaphthylene	ND	Ui	0.18	0.18	0.18	1	09/10/12	09/17/12	KWG1210410	
Acenaphthene	**0.83**		0.020	0.0050	0.0044	1	09/10/12	09/17/12	KWG1210410	
Fluorene	**3.3**		0.020	0.0050	0.0038	1	09/10/12	09/17/12	KWG1210410	
Phenanthrene	**0.81**		0.020	0.0050	0.0080	1	09/10/12	09/17/12	KWG1210410	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/10/12	09/17/12	KWG1210410	
Fluoranthene	**0.028**		0.020	0.0050	0.0044	1	09/10/12	09/17/12	KWG1210410	
Pyrene	**0.045**		0.020	0.0050	0.0035	1	09/10/12	09/17/12	KWG1210410	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/17/12	KWG1210410	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/10/12	09/17/12	KWG1210410	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/10/12	09/17/12	KWG1210410	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/17/12	KWG1210410	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/10/12	09/17/12	KWG1210410	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/17/12	KWG1210410	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/17/12	KWG1210410	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/10/12	09/17/12	KWG1210410	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	82	28-98	09/17/12	Acceptable
Fluoranthene-d10	89	31-105	09/17/12	Acceptable
Terphenyl-d14	71	27-112	09/17/12	Acceptable

9/10/2012

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/05/2012
Date Received: 09/07/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: 651-2012
Lab Code: K1208922-014

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	**29**	D	0.20	0.050	0.030	10	09/10/12	09/18/12	KWG1210410	
2-Methylnaphthalene	**20**	D	0.20	0.050	0.023	10	09/10/12	09/18/12	KWG1210410	
Acenaphthylene	ND	Ui	0.18	0.18	0.18	1	09/10/12	09/17/12	KWG1210410	
Acenaphthene	**0.96**		0.020	0.0050	0.0044	1	09/10/12	09/17/12	KWG1210410	
Fluorene	**2.5**		0.020	0.0050	0.0038	1	09/10/12	09/17/12	KWG1210410	
Phenanthrene	**0.93**		0.020	0.0050	0.0080	1	09/10/12	09/17/12	KWG1210410	
Anthracene	**0.050**		0.020	0.0050	0.0036	1	09/10/12	09/17/12	KWG1210410	
Fluoranthene	**0.064**		0.020	0.0050	0.0044	1	09/10/12	09/17/12	KWG1210410	
Pyrene	**0.056**		0.020	0.0050	0.0035	1	09/10/12	09/17/12	KWG1210410	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/17/12	KWG1210410	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/10/12	09/17/12	KWG1210410	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/10/12	09/17/12	KWG1210410	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/17/12	KWG1210410	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/10/12	09/17/12	KWG1210410	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/17/12	KWG1210410	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/17/12	KWG1210410	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/10/12	09/17/12	KWG1210410	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	86	28-98	09/17/12	Acceptable
Fluoranthene-d10	89	31-105	09/17/12	Acceptable
Terphenyl-d14	87	27-112	09/17/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/05/2012
Date Received: 09/07/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: 650-2012
Lab Code: K1208922-015

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Units: ug/L
Basis: NA

Level: Low

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	09/10/12	09/17/12	KWG1210410	
2-Methylnaphthalene	**0.012**	JX	0.020	0.0050	0.0023	1	09/10/12	09/17/12	KWG1210410	
Acenaphthylene	ND	Ui	0.020	0.017	0.017	1	09/10/12	09/17/12	KWG1210410	
Acenaphthene	**0.18**		0.020	0.0050	0.0044	1	09/10/12	09/17/12	KWG1210410	
Fluorene	**0.22**		0.020	0.0050	0.0038	1	09/10/12	09/17/12	KWG1210410	
Phenanthrene	ND	U	0.020	0.0050	0.0080	1	09/10/12	09/17/12	KWG1210410	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/10/12	09/17/12	KWG1210410	
Fluoranthene	**0.018**	J	0.020	0.0050	0.0044	1	09/10/12	09/17/12	KWG1210410	
Pyrene	**0.028**		0.020	0.0050	0.0035	1	09/10/12	09/17/12	KWG1210410	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/17/12	KWG1210410	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/10/12	09/17/12	KWG1210410	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/10/12	09/17/12	KWG1210410	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/17/12	KWG1210410	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/10/12	09/17/12	KWG1210410	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/17/12	KWG1210410	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/17/12	KWG1210410	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/10/12	09/17/12	KWG1210410	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	87	28-98	09/17/12	Acceptable
Fluoranthene-d10	89	31-105	09/17/12	Acceptable
Terphenyl-d14	99	27-112	09/17/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/06/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Polynuclear Aromatic Hydrocarbons

Sample Name:	14-113-2012	**Units:**	ug/L
Lab Code:	K1208922-016	**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	**0.21**		0.020	0.0050	0.0030	1	09/10/12	09/17/12	KWG1210410	
2-Methylnaphthalene	**0.13**		0.020	0.0050	0.0023	1	09/10/12	09/17/12	KWG1210410	
Acenaphthylene	ND	U	0.020	0.0050	0.0034	1	09/10/12	09/17/12	KWG1210410	
Acenaphthene	**0.0067**	J	0.020	0.0050	0.0044	1	09/10/12	09/17/12	KWG1210410	
Fluorene	**0.018**	J	0.020	0.0050	0.0038	1	09/10/12	09/17/12	KWG1210410	
Phenanthrene	**0.020**	J	0.020	0.0050	0.0080	1	09/10/12	09/17/12	KWG1210410	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/10/12	09/17/12	KWG1210410	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/10/12	09/17/12	KWG1210410	
Pyrene	ND	U	0.020	0.0050	0.0035	1	09/10/12	09/17/12	KWG1210410	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/17/12	KWG1210410	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/10/12	09/17/12	KWG1210410	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/10/12	09/17/12	KWG1210410	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/17/12	KWG1210410	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/10/12	09/17/12	KWG1210410	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/17/12	KWG1210410	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/17/12	KWG1210410	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/10/12	09/17/12	KWG1210410	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	82	28-98	09/17/12	Acceptable
Fluoranthene-d10	91	31-105	09/17/12	Acceptable
Terphenyl-d14	100	27-112	09/17/12	Acceptable

10/24/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 3 through September 6, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Gasoline Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208922

Sample Identification

TB090312
04-701-2012
04-204-2012
04-202-2012
04-100-2012
04-110-2012
04-210-2012
04-213-2012
14-113-2012

Introduction

This data review covers 9 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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
KWG1210787-5	9/14/12	Gasoline range organics (C6-C10)	15 ug/L	All samples in SDG K1208922

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 TB090312 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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 04-100-2012 and 04-110-2012 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)
	04-100-2012	04-110-2012	
Gasoline range organics (C6-C10)	3800	3600	5 (≤50)

Adak LTM 2012
Gasoline Range Organics - Data Qualification Summary - SDG K1208922

No Sample Data Qualified in this SDG

Adak LTM 2012
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208922

No Sample Data Qualified in this SDG

Adak LTM 2010
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1208922

No Sample Data Qualified in this SDG

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/03/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: TB090312
Lab Code: K1208922-001

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	ND	U	100	25	13	1	09/14/12	09/14/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	92	50-150	09/14/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/03/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Gasoline Range Organics

Sample Name:	04-701-2012	**Units:**	ug/L
Lab Code:	K1208922-002	**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	**100**	Y	100	25	13	1	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	92	50-150	09/15/12	Acceptable

9/10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/03/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: 04-204-2012
Lab Code: K1208922-003

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**200**	Y	100	25	13	1	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	88	50-150	09/15/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/04/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Gasoline Range Organics

Sample Name:	04-202-2012	**Units:**	ug/L
Lab Code:	K1208922-004	**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	**3400**	Y	100	25	13	1	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	92	50-150	09/15/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/04/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: 04-100-2012
Lab Code: K1208922-005

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

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	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	90	50-150	09/15/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/04/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: 04-110-2012
Lab Code: K1208922-006

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**3600**	Y	100	25	13	1	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	90	50-150	09/15/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/04/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: 04-210-2012
Lab Code: K1208922-007

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**6300**	Y	100	25	13	1	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	93	50-150	09/15/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/04/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: 04-213-2012
Lab Code: K1208922-008

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**3900**	Y	100	25	13	1	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	89	50-150	09/15/12	Acceptable

10/26/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, ADAK LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208922
Date Collected: 09/06/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: 14-113-2012
Lab Code: K1208922-016

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	**2000**	Y	100	25	13	1	09/14/12	09/14/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	89	50-150	09/14/12	Acceptable

10/24/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 3 through September 5, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208922

Sample Identification

04-204-2012
04-204-2012RE
04-202-2012
04-100-2012
04-210-2012
04-213-2012
653-2012
652-2012
651-2012
650-2012

Introduction

This data review covers 10 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
04-204-2012RE	Diesel range organics	15	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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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

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	Compound	%R (Limits)	Associated Samples	Flag	A or P
KWG1210589-3/4	Diesel range organics (C10-C25)	74 (75-125)	04-204-2012 04-213-2012 KWG1210589-5	J (all detects) UJ (all non-detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and LOQs/LODs

All compound quantitation and LOQs/LODs 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
04-204-2012RE	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

No field duplicates were identified in this SDG.

Adak LTM 2012
Diesel Range Organics - Data Qualification Summary - SDG K1208922

SDG	Sample	Compound	Flag	A or P	Reason
K1208922	04-204-2012RE	Diesel range organics (C10-C25)	J (all detects) UJ (all non-detects)	A	Technical holding times
K1208922	04-204-2012 04-213-2012	Diesel range organics (C10-C25)	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)
K1208922	04-204-2012RE	Diesel range organics (C10-C25)	R	A	Overall assessment

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208922

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1208922

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/03/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	04-204-2012	**Units:**	ug/L
Lab Code:	K1208922-003	**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	**360**	Y	J	49	20	11	1	09/12/12	09/17/12	KWG1210589	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	09/17/12	Acceptable

10/24/12

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/03/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	04-204-2012	**Units:**	ug/L
Lab Code:	K1208922-003RE	**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	R	50	20	11	1	09/18/12	09/19/12	KWG1210936	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/04/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	04-202-2012	**Units:**	ug/L
Lab Code:	K1208922-004	**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	**870**	L	50	20	11	1	09/18/12	09/19/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	90	50-150	09/19/12	Acceptable

9/10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/04/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	04-100-2012	**Units:**	ug/L
Lab Code:	K1208922-005	**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	**230**	L	49	20	11	1	09/18/12	09/19/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	81	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/04/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	04-210-2012	**Units:**	ug/L
Lab Code:	K1208922-007	**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	**430**	L	49	20	11	1	09/18/12	09/19/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	67	50-150	09/19/12	Acceptable

10/2nd/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/04/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	04-213-2012	**Units:**	ug/L
Lab Code:	K1208922-008	**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	**140**	L	J	49	20	11	1	09/12/12	09/17/12	KWG1210589	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	83	50-150	09/17/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/05/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	653-2012	**Units:**	ug/L
Lab Code:	K1208922-011	**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	**1900**	Y	50	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	82	50-150	09/20/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/05/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	652-2012	**Units:**	ug/L
Lab Code:	K1208922-013	**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	**4000**	Y	50	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	76	50-150	09/20/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/05/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	651-2012	**Units:**	ug/L
Lab Code:	K1208922-014	**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	09/18/12	09/19/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	81	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208922
Project:	TO 55, ADAK LTM 2012/14005.055.301	**Date Collected:**	09/05/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	650-2012	**Units:**	ug/L
Lab Code:	K1208922-015	**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	48	20	11	1	09/18/12	09/19/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	80	50-150	09/19/12	Acceptable

9/10/2012 V

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2012
Collection Date:	September 10 through September 11, 2012
LDC Report Date:	November 2, 2012
Matrix:	Sediment/Water
Parameters:	Volatiles
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1209207

Sample Identification

TB091012A
MW-187-1-A-2012
NL-09-2012
NL-09S-2012
TB091112

Introduction

This data review covers 2 sediment samples and 3 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%.

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 TB091012A and TB091112 were identified as trip blanks. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB091012A	9/10/12	Toluene	0.22 ug/L	MW-187-1-A-2012 NL-09-2012

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB091112	9/11/12	Toluene	1.0 mg/Kg	NL-09S-2012

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-09S-2012	Toluene	0.0070 mg/Kg	0.051U mg/Kg

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) 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Volatiles - Data Qualification Summary - SDG K1209207

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1209207

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Field Blank Data Qualification Summary - SDG K1209207

SDG	Sample	Compound	Modified Final Concentration	A or P
K1209207	NL-09S-2012	Toluene	0.051U mg/Kg	A

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209207
Date Collected: 09/10/2012
Date Received: 09/14/2012

Volatile Organic Compounds

Sample Name: TB091012A
Lab Code: K1209207-001

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	U	0.50	0.10	0.062	1	09/21/12	09/21/12	KWG1211103	
Toluene	**0.22**	J	0.50	0.10	0.054	1	09/21/12	09/21/12	KWG1211103	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/21/12	09/21/12	KWG1211103	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/21/12	09/21/12	KWG1211103	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/21/12	09/21/12	KWG1211103	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1.2-Dichloroethane-d4	86	70-120	09/21/12	Acceptable
Dibromofluoromethane	93	85-115	09/21/12	Acceptable
Toluene-d8	98	85-120	09/21/12	Acceptable
4-Bromofluorobenzene	91	75-120	09/21/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Volatile Organic Compounds

Sample Name:	MW-187-1-A-2012	**Units:**	ug/L
Lab Code:	K1209207-002	**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	**2.6**		0.50	0.10	0.062	1	09/21/12	09/21/12	KWG1211103	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	70-120	09/21/12	Acceptable
Dibromofluoromethane	93	85-115	09/21/12	Acceptable
Toluene-d8	99	85-120	09/21/12	Acceptable
4-Bromofluorobenzene	92	75-120	09/21/12	Acceptable

10/3/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Volatile Organic Compounds

Sample Name:	NL-09-2012	**Units:**	ug/L
Lab Code:	K1209207-011	**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	**0.96**		0.50	0.10	0.062	1	09/21/12	09/21/12	KWG1211103	
Toluene	**4.5**		0.50	0.10	0.054	1	09/21/12	09/21/12	KWG1211103	
Ethylbenzene	**8.8**		0.50	0.10	0.050	1	09/21/12	09/21/12	KWG1211103	
m,p-Xylenes	**6.0**		0.50	0.20	0.11	1	09/21/12	09/21/12	KWG1211103	
o-Xylene	**1.0**		0.50	0.20	0.074	1	09/21/12	09/21/12	KWG1211103	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	83	70-120	09/21/12	Acceptable
Dibromofluoromethane	90	85-115	09/21/12	Acceptable
Toluene-d8	99	85-120	09/21/12	Acceptable
4-Bromofluorobenzene	90	75-120	09/21/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Sediment

Service Request: K1209207
Date Collected: 09/11/2012
Date Received: 09/14/2012

Volatile Organic Compounds

Sample Name: NL-09S-2012
Lab Code: K1209207-012

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	0.051	0.011	0.0063	1	09/20/12	09/20/12	KWG1211036	
Toluene	**0.0070**	J	0.0514 0.051	0.011	0.0055	1	09/20/12	09/20/12	KWG1211036	
Ethylbenzene	ND	U	0.051	0.011	0.0051	1	09/20/12	09/20/12	KWG1211036	
m,p-Xylenes	ND	U	0.051	0.021	0.012	1	09/20/12	09/20/12	KWG1211036	
o-Xylene	**0.016**	J	0.051	0.021	0.0075	1	09/20/12	09/20/12	KWG1211036	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	91	68-119	09/20/12	Acceptable
1,2-Dichloroethane-d4	87	64-142	09/20/12	Acceptable
Toluene-d8	97	85-115	09/20/12	Acceptable
4-Bromofluorobenzene	95	85-120	09/20/12	Acceptable

10/2/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Sediment

Service Request: K1209207
Date Collected: 09/11/2012
Date Received: 09/14/2012

Volatile Organic Compounds

Sample Name: TB091112
Lab Code: K1209207-014

Extraction Method: EPA 5035A/5030B
Analysis Method: 8260C

Units: mg/Kg
Basis: Dry
Level: Med

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	09/20/12	09/20/12	KWG1211036	
Toluene	**1.0**		0.050	0.010	0.0054	1	09/20/12	09/20/12	KWG1211036	
Ethylbenzene	ND	U	0.050	0.010	0.0050	1	09/20/12	09/20/12	KWG1211036	
m,p-Xylenes	ND	U	0.050	0.020	0.011	1	09/20/12	09/20/12	KWG1211036	
o-Xylene	ND	U	0.050	0.020	0.0074	1	09/20/12	09/20/12	KWG1211036	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	90	68-119	09/20/12	Acceptable
1,2-Dichloroethane-d4	86	64-142	09/20/12	Acceptable
Toluene-d8	97	85-115	09/20/12	Acceptable
4-Bromofluorobenzene	95	85-120	09/20/12	Acceptable

10/24/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Adak LTM 2011
Collection Date:	September 11, 2012
LDC Report Date:	November 2, 2012
Matrix:	Sediment/Water
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level IV
Laboratory:	ALS Environmental
Sample Delivery Group (SDG):	K1209207

Sample Identification

NL-09-2012
NL-09S-2012

Introduction

This data review covers one sediment sample and one water sample 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 target compounds were within 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 difference (%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.

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2011
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1209207

No Sample Data Qualified in this SDG

Adak LTM 2011
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1209207

No Sample Data Qualified in this SDG

Adak LTM 2011
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1209207

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Polynuclear Aromatic Hydrocarbons

Sample Name:	NL-09-2012	**Units:**	ug/L
Lab Code:	K1209207-011	**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	**0.14**		0.020	0.0050	0.0030	1	09/18/12	09/22/12	KWG1210899	
2-Methylnaphthalene	**0.023**		0.020	0.0050	0.0023	1	09/18/12	09/22/12	KWG1210899	
Acenaphthylene	**0.0094**	J	0.020	0.0050	0.0034	1	09/18/12	09/22/12	KWG1210899	
Acenaphthene	**0.0099**	J	0.020	0.0050	0.0044	1	09/18/12	09/22/12	KWG1210899	
Fluorene	**0.023**		0.020	0.0050	0.0038	1	09/18/12	09/22/12	KWG1210899	
Phenanthrene	**0.0086**	J	0.020	0.0050	0.0080	1	09/18/12	09/22/12	KWG1210899	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/18/12	09/22/12	KWG1210899	
Fluoranthene	**0.0050**	J	0.020	0.0050	0.0044	1	09/18/12	09/22/12	KWG1210899	
Pyrene	**0.0074**	J	0.020	0.0050	0.0035	1	09/18/12	09/22/12	KWG1210899	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/18/12	09/22/12	KWG1210899	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/18/12	09/22/12	KWG1210899	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/18/12	09/22/12	KWG1210899	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/18/12	09/22/12	KWG1210899	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/18/12	09/22/12	KWG1210899	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/18/12	09/22/12	KWG1210899	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/18/12	09/22/12	KWG1210899	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/18/12	09/22/12	KWG1210899	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	85	28-98	09/22/12	Acceptable
Fluoranthene-d10	80	31-105	09/22/12	Acceptable
Terphenyl-d14	100	27-112	09/22/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Sediment	**Date Received:**	09/14/2012

Polynuclear Aromatic Hydrocarbons

Sample Name:	NL-09S-2012	**Units:**	ug/Kg
Lab Code:	K1209207-012	**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	**3.7**		3.5	1.0	0.60	1	09/20/12	09/26/12	KWG1211064	
2-Methylnaphthalene	ND	U	3.5	1.0	0.58	1	09/20/12	09/26/12	KWG1211064	
Acenaphthylene	ND	U	3.5	1.0	0.56	1	09/20/12	09/26/12	KWG1211064	
Acenaphthene	**1.5**	J	3.5	1.0	0.50	1	09/20/12	09/26/12	KWG1211064	
Fluorene	**4.7**		3.5	1.0	0.61	1	09/20/12	09/26/12	KWG1211064	
Phenanthrene	ND	U	3.5	1.0	1.4	1	09/20/12	09/26/12	KWG1211064	
Anthracene	ND	U	3.5	1.0	0.55	1	09/20/12	09/26/12	KWG1211064	
Fluoranthene	ND	U	3.5	1.0	0.98	1	09/20/12	09/26/12	KWG1211064	
Pyrene	**1.2**	J	3.5	1.0	0.76	1	09/20/12	09/26/12	KWG1211064	
Benz(a)anthracene	**1.2**	J	3.5	1.0	0.72	1	09/20/12	09/26/12	KWG1211064	
Chrysene	ND	U	3.5	1.0	0.80	1	09/20/12	09/26/12	KWG1211064	
Benzo(b)fluoranthene	**1.4**	J	3.5	1.0	0.92	1	09/20/12	09/26/12	KWG1211064	
Benzo(k)fluoranthene	ND	U	3.5	1.0	0.87	1	09/20/12	09/26/12	KWG1211064	
Benzo(a)pyrene	ND	U	3.5	1.0	0.99	1	09/20/12	09/26/12	KWG1211064	
Indeno(1,2,3-cd)pyrene	ND	U	3.5	1.0	0.87	1	09/20/12	09/26/12	KWG1211064	
Dibenz(a,h)anthracene	ND	U	3.5	1.0	0.80	1	09/20/12	09/26/12	KWG1211064	
Benzo(g,h,i)perylene	ND	U	3.5	1.0	0.85	1	09/20/12	09/26/12	KWG1211064	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	78	17-104	09/26/12	Acceptable
Fluoranthene-d10	96	27-106	09/26/12	Acceptable
Terphenyl-d14	109	35-109	09/26/12	Acceptable

10/24/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 10 through September 12, 2012

LDC Report Date: November 2, 2012

Matrix: Sediment/Water

Parameters: Gasoline Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1209207

Sample Identification

TB091012A
NL-09-2012
NL-09SA-2012
TB091112

Introduction

This data review covers 2 sediment samples and 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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
KWG1211221-5	9/22/12	Gasoline range organics (C6-C10)	14 ug/L	All water samples in SDG K1209207

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 TB091012A and TB091112 were identified as trip blanks. No gasoline range organic contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB091112	9/12/12	Gasoline range organics (C6-C10)	2.1 mg/Kg	NL-09SA-2012

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
NL-09SA-2012	Gasoline range organics (C6-C10)	2.2 mg/Kg	4.7U mg/Kg

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Gasoline Range Organics - Data Qualification Summary - SDG K1209207

No Sample Data Qualified in this SDG

Adak LTM 2012
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1209207

No Sample Data Qualified in this SDG

Adak LTM 2010
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1209207

SDG	Sample	Compound	Modified Final Concentration	A or P
K1209207	NL-09SA-2012	Gasoline range organics (C6-C10)	4.7U mg/Kg	A

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Gasoline Range Organics

Sample Name:	TB091012A	**Units:**	ug/L
Lab Code:	K1209207-001	**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	09/21/12	09/21/12	KWG1211221	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	88	50-150	09/21/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Gasoline Range Organics

Sample Name:	NL-09-2012	**Units:**	ug/L
Lab Code:	K1209207-011	**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	**150**	Y	100	25	13	1	09/21/12	09/21/12	KWG1211221	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	90	50-150	09/21/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/12/2012
Sample Matrix:	Sediment	**Date Received:**	09/14/2012

Gasoline Range Organics

Sample Name:	NL-09SA-2012	**Units:**	mg/Kg
Lab Code:	K1209207-013	**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	2.2	J	4.7 U	4.7	2.5	1.5	1	09/12/12	09/18/12	KWG1210932	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	71	50-150	09/18/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Sediment	**Date Received:**	09/14/2012

Gasoline Range Organics

Sample Name:	TB091112	**Units:**	mg/Kg
Lab Code:	K1209207-014	**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	**2.1**	J	5.0	2.5	1.5	1	09/11/12	09/18/12	KWG1210932	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	72	50-150	09/18/12	Acceptable

10/24/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 10 through September 11, 2012

LDC Report Date: November 2, 2012

Matrix: Sediment/Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1209207

Sample Identification

MW-107-1-2012
03-802-2012
AMW-704-2012
HMW-146-3-2012
03-103-2012
03-109-2012
RW-303-13-2012
NL-09-2012
NL-09S-2012
03-109-2012MS
03-109-2012MSD

Introduction

This data review covers one sediment sample and 10 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Diesel Range Organics - Data Qualification Summary - SDG K1209207

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1209207

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1209207

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	MW-107-1-2012	**Units:**	ug/L
Lab Code:	K1209207-003	**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	**2900**	Y	54	22	12	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	94	50-150	09/22/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	03-802-2012	**Units:**	ug/L
Lab Code:	K1209207-004	**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	ND	U	54	22	12	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	09/22/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	AMW-704-2012	**Units:**	ug/L
Lab Code:	K1209207-005	**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	**820**	Y	50	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	78	50-150	09/22/12	Acceptable

9/10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	HMW-146-3-2012	**Units:**	ug/L
Lab Code:	K1209207-006	**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	**1300**	Y	50	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	92	50-150	09/22/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	03-103-2012	**Units:**	ug/L
Lab Code:	K1209207-008	**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	**120**	Y	50	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	09/22/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	03-109-2012	**Units:**	ug/L
Lab Code:	K1209207-009	**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	17	J	52	21	12	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	83	50-150	09/22/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	RW-303-13-2012	**Units:**	ug/L
Lab Code:	K1209207-010	**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	**56**	Y	50	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	83	50-150	09/22/12	Acceptable

9 10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	NL-09-2012	**Units:**	ug/L
Lab Code:	K1209207-011	**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	**110**	Y	50	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	70	50-150	09/22/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209207
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Sediment	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	NL-09S-2012	**Units:**	mg/Kg
Lab Code:	K1209207-012	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	AK102		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	69	Y	9.4	4.7	1.9	1	09/21/12	09/24/12	KWG1211154	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/24/12	Acceptable

10/24/12

Comments:

Laboratory Data Consultants, Inc.

7750 El Camino Real, Ste. 2L Carlsbad, CA 92009

Phone 760.634.0437 **Web** www.lab-data.com **Fax** 760.634.0439

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 2, 2012

SUBJECT: ADAK LTM 2012, 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 10, 2012. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 28561:

SDG #	Fraction
K1208652 K1208737	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,

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

EDD Level IV

LDC #28561A (Sealaska-Poulsbo, WA / Adak LTM 2012)

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (8260C)		BTEX (8260B)		Benz. (8260C)		Pb (6020A)		Diss Pb (6020A)		GRO (AK101)		DRO (AK102)																					
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
A	K1208652	10/10/12	10/31/12	2	0	4	0	4	0	2	0	2	0	6	0	7	0																				
B	K1208737	10/10/12	10/31/12	-	-	3	0	2	0	-	-	-	-	5	0	5	0																				
Total	A/LR			2	0	7	0	6	0	2	0	2	0	11	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42

Shaded cells indicate Level IV validation (all other cells are ADEC Checklist validation). These sample counts do not inclute MS/MSD, and DUPs

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 27 through August 30, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208652

Sample Identification

02-231-2012
02-241-2012
02-232-2012
AS-1-2012
TB-082712
02-478-2012
NMCB-12-2012
NMCB-11-2012
02-455-2012
01-153-2012
NMCB-11-2012MS
NMCB-11-2012MSD
01-153-2012MS
01-153-2012MSD

Introduction

This data review covers 14 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%.

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 TB-082712 was identified as a trip blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB-082712	8/27/12	Toluene	0.25 ug/L	02-231-2012 02-241-2012 02-232-2012 AS-1-2012 02-478-2012 NMCB-12-2012 NMCB-11-2012 02-455-2012 01-153-2012

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
02-232-2012	Toluene	0.46 ug/L	0.50U ug/L
AS-1-2012	Toluene	1.0 ug/L	1.0U 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
02-231-2012	Toluene-d8	121 (85-120)	Benzene Toluene o-Xylene	J (all detects) J (all detects) J (all detects)	A

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. 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 02-231-2012 and 02-241-2012 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	02-231-2012	02-241-2012	
Benzene	25	26	4 (≤50)
Toluene	3.9	3.8	3 (≤50)
Ethylbenzene	70	74	6 (≤50)
m,p-Xylenes	260	280	7 (≤50)
o-Xylene	8.9	9.1	2 (≤50)

Adak LTM 2012
Volatiles - Data Qualification Summary - SDG K1208652

SDG	Sample	Compound	Flag	A or P	Reason
K1208652	02-231-2012	Benzene Toluene o-Xylene	J (all detects) J (all detects) J (all detects)	A	Surrogate spikes (%R)

Adak LTM 2012
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1208652

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Field Blank Data Qualification Summary - SDG K1208652

SDG	Sample	Compound	Modified Final Concentration	A or P
K1208652	02-232-2012	Toluene	0.50U ug/L	A
K1208652	AS-1-2012	Toluene	1.0U ug/L	A

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/27/2012
Date Received: 08/31/2012

Volatile Organic Compounds

Sample Name: 02-231-2012
Lab Code: K1208652-001

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	25		J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210323	
Toluene	3.9		J	0.50	0.10	0.054	1	09/07/12	09/07/12	KWG1210323	
Ethylbenzene	70	D		2.5	0.50	0.25	5	09/07/12	09/07/12	KWG1210370	
m,p-Xylenes	260	D		2.5	1.0	0.55	5	09/07/12	09/07/12	KWG1210370	
o-Xylene	8.9		J	0.50	0.20	0.074	1	09/07/12	09/07/12	KWG1210323	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	95	70-120	09/07/12	Acceptable
Dibromofluoromethane	104	85-115	09/07/12	Acceptable
Toluene-d8	121	85-120	09/07/12	Outside Control Limits
4-Bromofluorobenzene	109	75-120	09/07/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/27/2012
Date Received: 08/31/2012

Volatile Organic Compounds

Sample Name: 02-241-2012
Lab Code: K1208652-002

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	**26**		0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210323	
Toluene	**3.8**		0.50	0.10	0.054	1	09/07/12	09/07/12	KWG1210323	
Ethylbenzene	**74**	D	2.5	0.50	0.25	5	09/07/12	09/07/12	KWG1210370	
m,p-Xylenes	**280**	D	2.5	1.0	0.55	5	09/07/12	09/07/12	KWG1210370	
o-Xylene	**9.1**		0.50	0.20	0.074	1	09/07/12	09/07/12	KWG1210323	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	70-120	09/07/12	Acceptable
Dibromofluoromethane	102	85-115	09/07/12	Acceptable
Toluene-d8	117	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	108	75-120	09/07/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/27/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	02-232-2012	**Units:**	ug/L
Lab Code:	K1208652-003	**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	**0.19**	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210323	
Toluene	**0.46**	J	0.50U 0.50	0.10	0.054	1	09/07/12	09/07/12	KWG1210323	
Ethylbenzene	**3.3**		0.50	0.10	0.050	1	09/07/12	09/07/12	KWG1210323	
m,p-Xylenes	**0.45**	J	0.50	0.20	0.11	1	09/07/12	09/07/12	KWG1210323	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/07/12	09/07/12	KWG1210323	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	70-120	09/07/12	Acceptable
Dibromofluoromethane	109	85-115	09/07/12	Acceptable
Toluene-d8	118	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	103	75-120	09/07/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/27/2012
Date Received: 08/31/2012

Volatile Organic Compounds

Sample Name: AS-1-2012
Lab Code: K1208652-004

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
Benzene	13		0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210323	
Toluene	1.0	U	0.50	0.10	0.054	1	09/07/12	09/07/12	KWG1210323	
Ethylbenzene	9.1		0.50	0.10	0.050	1	09/07/12	09/07/12	KWG1210323	
m,p-Xylenes	8.9		0.50	0.20	0.11	1	09/07/12	09/07/12	KWG1210323	
o-Xylene	0.12	J	0.50	0.20	0.074	1	09/07/12	09/07/12	KWG1210323	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	95	70-120	09/07/12	Acceptable
Dibromofluoromethane	106	85-115	09/07/12	Acceptable
Toluene-d8	117	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	104	75-120	09/07/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/27/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	TB-082712	**Units:**	ug/L
Lab Code:	K1208652-005	**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
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/07/12	09/07/12	KWG1210323	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/07/12	09/07/12	KWG1210323	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/07/12	09/07/12	KWG1210323	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/07/12	09/07/12	KWG1210323	
Benzene	ND	U	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210323	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/07/12	09/07/12	KWG1210323	
Toluene	**0.25**	J	0.50	0.10	0.054	1	09/07/12	09/07/12	KWG1210323	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/07/12	09/07/12	KWG1210323	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/07/12	09/07/12	KWG1210323	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/07/12	09/07/12	KWG1210323	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/07/12	09/07/12	KWG1210323	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	108	85-115	09/07/12	Acceptable
1,2-Dichloroethane-d4	97	70-120	09/07/12	Acceptable
Toluene-d8	118	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	103	75-120	09/07/12	Acceptable

10/4/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Volatile Organic Compounds

Sample Name: 02-478-2012
Lab Code: K1208652-006

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	0.21	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	94	70-120	09/07/12	Acceptable
Dibromofluoromethane	107	85-115	09/07/12	Acceptable
Toluene-d8	117	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	104	75-120	09/07/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	NMCB-12-2012	**Units:**	ug/L
Lab Code:	K1208652-007	**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	**0.090**	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	90	70-120	09/07/12	Acceptable
Dibromofluoromethane	104	85-115	09/07/12	Acceptable
Toluene-d8	117	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	106	75-120	09/07/12	Acceptable

10/2nd/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Volatile Organic Compounds

Sample Name: NMCB-11-2012
Lab Code: K1208652-008

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	0.11	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	92	70-120	09/07/12	Acceptable
Dibromofluoromethane	103	85-115	09/07/12	Acceptable
Toluene-d8	117	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	104	75-120	09/07/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	02-455-2012	**Units:**	ug/L
Lab Code:	K1208652-009	**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	**0.42**	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	95	70-120	09/07/12	Acceptable
Dibromofluoromethane	105	85-115	09/07/12	Acceptable
Toluene-d8	117	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	106	75-120	09/07/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/30/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	01-153-2012	**Units:**	ug/L
Lab Code:	K1208652-011	**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	09/08/12	09/08/12	KWG1210395	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/08/12	09/08/12	KWG1210395	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/08/12	09/08/12	KWG1210395	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/08/12	09/08/12	KWG1210395	
Trichloroethene (TCE)	**0.21**	J	0.50	0.10	0.10	1	09/08/12	09/08/12	KWG1210395	
Tetrachloroethene (PCE)	**3.9**		0.50	0.20	0.099	1	09/08/12	09/08/12	KWG1210395	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	111	85-115	09/08/12	Acceptable
1,2-Dichloroethane-d4	97	70-120	09/08/12	Acceptable
Toluene-d8	118	85-120	09/08/12	Acceptable
4-Bromofluorobenzene	100	75-120	09/08/12	Acceptable

10/24/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 30, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Lead

Validation Level: EPA Level IV

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K1208652

Sample Identification

MW14-5-2012
MW24-5-2012
MW14-5-2012F
MW24-5-2012F
MW14-5-2012MS
MW14-5-2012MSD
MW14-5-2012FMS
MW14-5-2012FMSD

Introduction

This data review covers 8 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	0.009 ug/L	All samples in SDG K1208652

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 MW14-5-2012 and MW24-5-2012 and samples MW14-5-2012F and MW24-5-2012F were identified as field duplicates. No lead was detected in any of the samples with the following exceptions:

Analyte	Concentration (ug/L)		RPD
	MW14-5-2012	MW24-5-2012	
Lead	17.2	17.3	1

Analyte	Concentration (ug/L)		RPD
	MW14-5-2012F	MW24-5-2012F	
Lead	17.0	17.4	2

Adak LTM 2012
Lead - Data Qualification Summary - SDG K1208652

No Sample Data Qualified in this SDG

Adak LTM 2012
Lead - Laboratory Blank Data Qualification Summary - SDG K1208652

No Sample Data Qualified in this SDG

Adak LTM 2012
Lead - Field Blank Data Qualification Summary - SDG K1208652

No Sample Data Qualified in this SDG

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1208652
Project No.:	14005.055.301	**Date Collected:**	08/30/12
Project Name:	TO 55, Adak LTM 2012	**Date Received:**	08/31/12
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW14-5-2012 **Lab Code:** K1208652-012

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	09/05/12	09/14/12	17.2		

Comments:

10/24/12

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1208652
Project No.:	14005.055.301	**Date Collected:**	08/30/12
Project Name:	TO 55, Adak LTM 2012	**Date Received:**	08/31/12
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW14-5-2012 **Lab Code:** K1208652-012DISS

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	09/05/12	09/14/12	17.0		

Comments:

10/24/12

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1208652
Project No.:	14005.055.301	**Date Collected:**	08/30/12
Project Name:	TO 55, Adak LTM 2012	**Date Received:**	08/31/12
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW24-5-2012 **Lab Code:** K1208652-013

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	09/05/12	09/14/12	17.3		

Comments:

10/24/12

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Sealaska Environmental Services	**Service Request:**	K1208652
Project No.:	14005.055.301	**Date Collected:**	08/30/12
Project Name:	TO 55, Adak LTM 2012	**Date Received:**	08/31/12
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: MW24-5-2012 **Lab Code:** K1208652-013DISS

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	09/05/12	09/14/12	17.4		

Comments:

10/04/12

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 29 through August 30, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Gasoline Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208652

Sample Identification

02-478-2012
NMCB-12-2012
NMCB-11-2012
02-455-2012
TB082912C
NMCB-11-2012MS
NMCB-11-2012MSD
MW14-5-2012

Introduction

This data review covers 8 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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
KWG1210546-5	9/11/12	Gasoline range organics (C6-C10)	14 ug/L	All samples in SDG K1208652

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	Reported Concentration	Modified Final Concentration
NMCB-12-2012	Gasoline range organics (C6-C10)	70 ug/L	100U ug/L
NMCB-11-2012	Gasoline range organics (C6-C10)	17 ug/L	100U ug/L
02-455-2012	Gasoline range organics (C6-C10)	59 ug/L	100U ug/L
TB082912C	Gasoline range organics (C6-C10)	18 ug/L	100U ug/L

Sample TB082912C was identified as a trip blank. No gasoline range organic contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB082912C	8/29/12	Gasoline range organics (C6-C10)	18 ug/L	02-478-2012 NMCB-12-2012 NMCB-11-2012 02-455-2012 MW14-5-2012

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
02-478-2012	Gasoline range organics (C6-C10)	78 ug/L	100U ug/L
NMCB-12-2012	Gasoline range organics (C6-C10)	70 ug/L	100U ug/L
NMCB-11-2012	Gasoline range organics (C6-C10)	17 ug/L	100U ug/L
02-455-2012	Gasoline range organics (C6-C10)	59 ug/L	100U ug/L

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Gasoline Range Organics - Data Qualification Summary - SDG K1208652

No Sample Data Qualified in this SDG

Adak LTM 2012
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208652

SDG	Sample	Compound	Modified Final Concentration	A or P
K1208652	NMCB-12-2012	Gasoline range organics (C6-C10)	100U ug/L	A
K1208652	NMCB-11-2012	Gasoline range organics (C6-C10)	100U ug/L	A
K1208652	02-455-2012	Gasoline range organics (C6-C10)	100U ug/L	A
K1208652	TB082912C	Gasoline range organics (C6-C10)	100U ug/L	A

Adak LTM 2010
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1208652

SDG	Sample	Compound	Modified Final Concentration	A or P
K1208652	02-478-2012	Gasoline range organics (C6-C10)	100U ug/L	A
K1208652	NMCB-12-2012	Gasoline range organics (C6-C10)	100U ug/L	A
K1208652	NMCB-11-2012	Gasoline range organics (C6-C10)	100U ug/L	A
K1208652	02-455-2012	Gasoline range organics (C6-C10)	100U ug/L	A

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: 02-478-2012
Lab Code: K1208652-006

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	78	J 1000	100	25	13	1	09/10/12	09/10/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	79	50-150	09/10/12	Acceptable

9/10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: NMCB-12-2012
Lab Code: K1208652-007

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	70	J	100	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	80	50-150	09/11/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: NMCB-11-2012
Lab Code: K1208652-008

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	17	J 100U	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	80	50-150	09/11/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: 02-455-2012
Lab Code: K1208652-009

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	59	J 1004	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	85	50-150	09/11/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: TB-082912C
Lab Code: K1208652-010

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	18	J	100U	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	84	50-150	09/11/12	Acceptable

9/10/26/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/30/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: MW14-5-2012
Lab Code: K1208652-012

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

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	09/10/12	09/10/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	123	50-150	09/10/12	Acceptable

9/10/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 27 through August 30, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208652

Sample Identification

02-231-2012
02-241-2012
02-478-2012
NMCB-12-2012
NMCB-11-2012
02-455-2012
MW14-5-2012
02-231-2012RX
02-241-2012RX
02-478-2012RX
NMCB-12-2012RX
NMCB-11-2012RX
02-455-2012RX
MW14-5-2012RX

Samples appended with RX were re-extracted.

Introduction

This data review covers 10 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
02-231-2012RX 02-241-2012RX	Diesel range organics (C10-C25)	29	14	J (all detects) UJ (all non-detects)	A
02-478-2012 RX NMCB-12-2012RX NMCB-11-2012RX 02-455-2012RX	Diesel range organics (C10-C25)	27	14	J (all detects) UJ (all non-detects)	A
MW14-5-2012RX	Diesel range organics (C10-C25)	26	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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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

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
KWG1210265-5 (02-231-2012 02-241-2012 02-478-2012 NMCB-12-2012 NMCB-11-2012 02-455-2012 MW14-5-2012 KWG1210265-7)	Diesel range organics (C10-C25)	69 (75-125)	-	-	J (all detects) UJ (all non-detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and LOQs/LODs

All compound quantitation and LOQs/LODs 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
02-231-2012RX 02-241-2012RX 02-478-2012RX NMCB-12-2012RX NMCB-11-2012RX 02-455-2012RX MW14-5-2012RX	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 02-231-2012 and 02-241-2012 and samples 02-231-2012RX and 02-241-2012RX 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)
	02-231-2012	02-241-2012	
Diesel range organics (C10-C25)	5400	5700	5 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	02-231-2012RX	02-241-2012RX	
Diesel range organics (C10-C25)	5600	5500	2 (≤50)

Adak LTM 2012
Diesel Range Organics - Data Qualification Summary - SDG K1208652

SDG	Sample	Compound	Flag	A or P	Reason
K1208652	02-231-2012RX 02-241-2012RX 02-478-2012 RX NMCB-12-2012RX NMCB-11-2012RX 02-455-2012RX MW14-5-2012RX	Diesel range organics (C10-C25)	J (all detects) UJ (all non-detects)	A	Technical holding times
K1208652	02-231-2012 02-241-2012 02-478-2012 NMCB-12-2012 NMCB-11-2012 02-455-2012 MW14-5-2012	Diesel range organics (C10-C25)	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)
K1208652	02-231-2012RX 02-241-2012RX 02-478-2012RX NMCB-12-2012RX NMCB-11-2012RX 02-455-2012RX MW14-5-2012RX	Diesel range organics (C10-C25)	R	A	Overall assessment

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208652

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1208652

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/27/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	02-231-2012	**Units:**	ug/L
Lab Code:	K1208652-001	**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	**5400**	Y J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	115	50-150	09/19/12	Acceptable

9/10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/27/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	02-241-2012	**Units:**	ug/L
Lab Code:	K1208652-002	**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	**5700**	Y	J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	112	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Diesel Range Organics

Sample Name: 02-478-2012
Lab Code: K1208652-006

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	4400	Y	J	50	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	116	50-150	09/19/12	Acceptable

9/10/2012

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Diesel Range Organics

Sample Name: NMCB-12-2012
Lab Code: K1208652-007

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	**3100**	Y J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	81	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Diesel Range Organics

Sample Name: NMCB-11-2012
Lab Code: K1208652-008

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	2600	Y J	48	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	02-455-2012	**Units:**	ug/L
Lab Code:	K1208652-009	**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	**290**	Y	J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	71	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/30/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	MW14-5-2012	**Units:**	ug/L
Lab Code:	K1208652-012	**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	**3100**	L J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	77	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/27/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	02-231-2012	**Units:**	ug/L
Lab Code:	K1208652-001	**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	R	49	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	140	50-150	09/27/12	Acceptable

9/10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/27/2012
Date Received: 08/31/2012

Diesel Range Organics

Sample Name: 02-241-2012
Lab Code: K1208652-002

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**5500**	Y R	49	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	140	50-150	09/27/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208652
Date Collected: 08/29/2012
Date Received: 08/31/2012

Diesel Range Organics

Sample Name: 02-478-2012
Lab Code: K1208652-006

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**4500**	Y R	48	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	135	50-150	09/27/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	NMCB-12-2012	**Units:**	ug/L
Lab Code:	K1208652-007	**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	**3200**	Y R	49	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	118	50-150	09/27/12	Acceptable

9/10/2012

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	NMCB-11-2012	**Units:**	ug/L
Lab Code:	K1208652-008	**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	**2700**	Y	R	49	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	113	50-150	09/27/12	Acceptable

9/10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	02-455-2012	**Units:**	ug/L
Lab Code:	K1208652-009	**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	**350**	Y R	49	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	110	50-150	09/27/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208652
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/30/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	MW14-5-2012	**Units:**	ug/L
Lab Code:	K1208652-012	**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	**3400**	L R	49	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	109	50-150	09/27/12	Acceptable

9/10/24/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 31 through September 1, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208737

Sample Identification

TB083112
12-145-2012
12-802-2012
14-210-2012
TFB-MW4B-2012

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 8260B 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% with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/8/12	Toluene	20.4	TB083112 14-210-2012 TFB-MW4B-2012 KWG1210395-4	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.

Sample TB083112 was identified as a trip blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB083112	8/31/12	Toluene	0.53 ug/L	12-145-2012 12-802-2012 14-210-2012 TFB-MW4B-2012

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
14-210-2012	Toluene	0.36 ug/L	0.50U 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
14-210-2012	Toluene-d8	123 (85-120)	All TCL compounds	J (all 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) 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Volatiles - Data Qualification Summary - SDG K1208737

SDG	Sample	Compound	Flag	A or P	Reason
K1208737	TB083112 14-210-2012 TFB-MW4B-2012	Toluene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K1208737	14-210-2012	All TCL compounds	J (all detects)	P	Surrogate spikes (%R)

Adak LTM 2012
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1208737

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Field Blank Data Qualification Summary - SDG K1208737

SDG	Sample	Compound	Modified Final Concentration	A or P
K1208737	14-210-2012	Toluene	0.50U ug/L	A

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208737
Project:	TO 55, Adak LTM 2012/14005.055 301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Volatile Organic Compounds

Sample Name:	TB083112	**Units:**	ug/L
Lab Code:	K1208737-001	**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	0.50	0.10	0.062	1	09/08/12	09/08/12	KWG1210395	
Toluene	**0.53**	J	0.50	0.10	0.054	1	09/08/12	09/08/12	KWG1210395	*
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/08/12	09/08/12	KWG1210395	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/08/12	09/08/12	KWG1210395	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/08/12	09/08/12	KWG1210395	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	94	70-120	09/08/12	Acceptable
Dibromofluoromethane	107	85-115	09/08/12	Acceptable
Toluene-d8	118	85-120	09/08/12	Acceptable
4-Bromofluorobenzene	102	75-120	09/08/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208737
Project:	TO 55, Adak LTM 2012/14005.055 301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Volatile Organic Compounds

Sample Name:	12-145-2012	**Units:**	ug/L
Lab Code:	K1208737-003	**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	**1.4**		0.50	0.10	0.062	1	09/08/12	09/08/12	KWG1210395	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	70-120	09/08/12	Acceptable
Dibromofluoromethane	109	85-115	09/08/12	Acceptable
Toluene-d8	120	85-120	09/08/12	Acceptable
4-Bromofluorobenzene	108	75-120	09/08/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208737
Project:	TO 55, Adak LTM 2012/14005.055 301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Volatile Organic Compounds

Sample Name:	12-802-2012	**Units:**	ug/L
Lab Code:	K1208737-004	**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	09/08/12	09/08/12	KWG1210395	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	70-120	09/08/12	Acceptable
Dibromofluoromethane	103	85-115	09/08/12	Acceptable
Toluene-d8	117	85-120	09/08/12	Acceptable
4-Bromofluorobenzene	105	75-120	09/08/12	Acceptable

Comments:

10/24/12

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208737
Project:	TO 55, Adak LTM 2012/14005.055 301	**Date Collected:**	09/01/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Volatile Organic Compounds

Sample Name:	14-210-2012	**Units:**	ug/L
Lab Code:	K1208737-005	**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	**0.080**	J	0.50	0.10	0.062	1	09/08/12	09/08/12	KWG1210395	
Toluene	0.50U **0.36**	J	0.50	0.10	0.054	1	09/08/12	09/08/12	KWG1210395	*
Ethylbenzene	**0.10**	J	0.50	0.10	0.050	1	09/08/12	09/08/12	KWG1210395	
m,p-Xylenes	**0.48**	J	0.50	0.20	0.11	1	09/08/12	09/08/12	KWG1210395	
o-Xylene	**0.080**	J	0.50	0.20	0.074	1	09/08/12	09/08/12	KWG1210395	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	94	70-120	09/08/12	Acceptable
Dibromofluoromethane	106	85-115	09/08/12	Acceptable
Toluene-d8	123	85-120	09/08/12	Outside Control Limits
4-Bromofluorobenzene	107	75-120	09/08/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055 301
Sample Matrix: Water

Service Request: K1208737
Date Collected: 09/01/2012
Date Received: 09/04/2012

Volatile Organic Compounds

Sample Name: TFB-MW4B-2012
Lab Code: K1208737-006

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	**24**	D		10	2.0	1.3	20	09/08/12	09/08/12	KWG1210395	
Toluene	**4800**	D	J	130	25	14	250	09/08/12	09/08/12	KWG1210395	*
Ethylbenzene	**2100**	D		130	25	13	250	09/08/12	09/08/12	KWG1210395	
m,p-Xylenes	**12000**	D		130	50	28	250	09/08/12	09/08/12	KWG1210395	
o-Xylene	**3600**	D		130	50	19	250	09/08/12	09/08/12	KWG1210395	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	70-120	09/08/12	Acceptable
Dibromofluoromethane	101	85-115	09/08/12	Acceptable
Toluene-d8	118	85-120	09/08/12	Acceptable
4-Bromofluorobenzene	105	75-120	09/08/12	Acceptable

10/30/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 31 through September 1, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Gasoline Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208737

Sample Identification

TB083112
12-145-2012
12-802-2012
14-210-2012
TFB-MW4B-2012

Introduction

This data review covers 5 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% 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 TB083112 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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Gasoline Range Organics - Data Qualification Summary - SDG K1208737

No Sample Data Qualified in this SDG

Adak LTM 2012
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208737

No Sample Data Qualified in this SDG

Adak LTM 2010
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1208737

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208737
Project:	TO 55, Adak LTM 2012/14005.055 301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Gasoline Range Organics

Sample Name:	TB083112	**Units:**	ug/L
Lab Code:	K1208737-001	**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	09/13/12	09/13/12	KWG1210785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	96	50-150	09/13/12	Acceptable

9/10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055 301
Sample Matrix: Water

Service Request: K1208737
Date Collected: 08/31/2012
Date Received: 09/04/2012

Gasoline Range Organics

Sample Name: 12-145-2012
Lab Code: K1208737-003

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**1200**	Y	100	25	13	1	09/14/12	09/14/12	KWG1210785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	88	50-150	09/14/12	Acceptable

9/10/14/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055 301
Sample Matrix: Water

Service Request: K1208737
Date Collected: 08/31/2012
Date Received: 09/04/2012

Gasoline Range Organics

Sample Name: 12-802-2012
Lab Code: K1208737-004

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

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	09/13/12	09/13/12	KWG1210785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	94	50-150	09/13/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055 301
Sample Matrix: Water

Service Request: K1208737
Date Collected: 09/01/2012
Date Received: 09/04/2012

Gasoline Range Organics

Sample Name: 14-210-2012
Lab Code: K1208737-005

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	**2400**	Y	100	25	13	1	09/14/12	09/14/12	KWG1210785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	92	50-150	09/14/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055 301
Sample Matrix: Water

Service Request: K1208737
Date Collected: 09/01/2012
Date Received: 09/04/2012

Gasoline Range Organics

Sample Name: TFB-MW4B-2012
Lab Code: K1208737-006

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	**36000**	DY	2500	630	330	25	09/14/12	09/14/12	KWG1210785	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	91	50-150	09/14/12	Acceptable

9/10/24/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 31 through September 1, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208737

Sample Identification

MW-116-2012
12-145-2012
12-802-2012
01-150-2012
01-118-2012
01-150-2012MS
01-150-2012MSD
MW-116-2012RX
12-145-2012RX
12-802-2012RX
01-150-2012RX
01-118-2012RX
01-150-2012RXMS
01-150-2012RXMSD

Samples appended with RX were re-extracted.

Introduction

This data review covers 14 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
MW-116-2012RX 12-145-2012RX 12-802-2012RX	Diesel range organics (C10-C25)	25	14	J (all detects) UJ (all non-detects)	A
01-150-2012RX 01-118-2012RX 01-150-2012RX MS 01-150-2012RX MSD	Diesel range organics (C10-C25)	24	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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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

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
KWG1210265-5 (01-150-2012 01-118-2012 01-150-2012MS 01-150-2012MSD MW-116-2012 12-145-2012 12-802-2012 KWG1210265-7)	Diesel range organics (C10-C25)	69 (75-125)	-	-	J (all detects) UJ (all non-detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and LOQs/LODs

All compound quantitation and LOQs/LODs 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
MW-116-2012RX 12-145-2012RX 12-802-2012RX 01-150-2012RX 01-118-2012RX	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

No field duplicates were identified in this SDG.

Adak LTM 2012
Diesel Range Organics - Data Qualification Summary - SDG K1208737

SDG	Sample	Compound	Flag	A or P	Reason
K1208737	MW-116-2012RX 12-145-2012RX 12-802-2012RX 01-150-2012RX 01-118-2012RX	Diesel range organics (C10-C25)	J (all detects) UJ (all non-detects)	A	Technical holding times
K1208737	01-150-2012 01-118-2012 MW-116-2012 12-145-2012 12-802-2012	Diesel range organics (C10-C25)	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)
K1208737	MW-116-2012RX 12-145-2012RX 12-802-2012RX 01-150-2012RX 01-118-2012RX	Diesel range organics (C10-C25)	R	A	Overall assessment

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208737

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1208737

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208737
Project:	TO 55, Adak LTM 2012/14005.055 301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	MW-116-2012	**Units:**	ug/L
Lab Code:	K1208737-002	**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	24	J	J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	83	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208737
Project:	TO 55, Adak LTM 2012/14005.055 301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	12-145-2012	**Units:**	ug/L
Lab Code:	K1208737-003	**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	**2200**	Y	J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	09/19/12	Acceptable

10/2/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055 301
Sample Matrix: Water

Service Request: K1208737
Date Collected: 08/31/2012
Date Received: 09/04/2012

Diesel Range Organics

Sample Name: 12-802-2012
Lab Code: K1208737-004

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	12	J	J	50	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	74	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055 301
Sample Matrix: Water

Service Request: K1208737
Date Collected: 09/01/2012
Date Received: 09/04/2012

Diesel Range Organics

Sample Name: 01-150-2012
Lab Code: K1208737-007

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1300**	Y	J	50	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	80	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208737
Project:	TO 55, Adak LTM 2012/14005.055 301	**Date Collected:**	09/01/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	01-118-2012	**Units:**	ug/L
Lab Code:	K1208737-008	**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	**9400**	Y J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	98	50-150	09/19/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055 301
Sample Matrix: Water

Service Request: K1208737
Date Collected: 08/31/2012
Date Received: 09/04/2012

Diesel Range Organics

Sample Name: MW-116-2012
Lab Code: K1208737-002

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	35	J R	49	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	116	50-150	09/27/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055 301
Sample Matrix: Water

Service Request: K1208737
Date Collected: 08/31/2012
Date Received: 09/04/2012

Diesel Range Organics

Sample Name: 12-145-2012
Lab Code: K1208737-003

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q		LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**2600**	Y	R	50	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	123	50-150	09/27/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055 301
Sample Matrix: Water

Service Request: K1208737
Date Collected: 08/31/2012
Date Received: 09/04/2012

Diesel Range Organics

Sample Name: 12-802-2012
Lab Code: K1208737-004

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	16	J R	49	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	104	50-150	09/27/12	Acceptable

10/04/12

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208737
Project:	TO 55, Adak LTM 2012/14005.055 301	**Date Collected:**	09/01/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	01-150-2012	**Units:**	ug/L
Lab Code:	K1208737-007	**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	**1300**	Y	R	50	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	102	50-150	09/27/12	Acceptable

10/24/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208737
Project:	TO 55, Adak LTM 2012/14005.055 301	**Date Collected:**	09/01/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	01-118-2012	**Units:**	ug/L
Lab Code:	K1208737-008	**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	**9600**	Y	R	49	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	123	50-150	09/27/12	Acceptable

10/24/12

Comments:

Laboratory Data Review Checklist

Completed by:	Linda Rauto, Bing Roura, Mark Gregg		
Title:	Project Chemist	Date:	Nov 26, 2012
CS Report Name:	28561C	Report Date:	Nov 26, 2012
Consultant Firm:	Laboratory Data Consultants, Inc.		
Laboratory Name:	Columbia Analytical Services	Laboratory Report Number:	K1209248
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:

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:

Cooler temperatures were reported at -0.9°C to 1.5°C.

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, no temperatures were above 6°C.

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:

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.

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:

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:

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:

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:

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:

iii. All results less than PQL?

◉ Yes ○ No ○ NA (Please explain.) Comments:

iv. If above PQL, what samples are affected?

Comments:

v. Data quality or usability affected? (Please explain.)

Comments:

Data is usable

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:

iii. Precision - All relative percent differences (RPD) less than specified DQOs?
(Recommended: 30% water, 50% soil)

$$RPD\ (\%) = \text{Absolute Value of: } \frac{(R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

○ Yes ○ No ◉ NA (Please explain) Comments:

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

○ Yes ○ No ◉ NA (Please explain) Comments:

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:

ii. If above PQL, what samples are affected?

Comments:

iii. Data quality or usability affected? (Please explain.)

Comments:

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

◉ Yes ○ No ○ NA (Please explain) Comments:

Reset Form

Laboratory Data Consultants, Inc.

7750 El Camino Real, Ste. 2L Carlsbad, CA 92009

Phone 760.634.0437 **Web** www.lab-data.com **Fax** 760.634.0439

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 2, 2012

SUBJECT: Revised ADAK LTM 2012, Data Validation

Dear Ms. Wunderlich,

Enclosed are the revised data validation reports for the fractions listed below. Please replace the previously submitted reports with the enclosed revised reports.

LDC Project # 28567:

SDG #	Fraction
K1208915 K1208971 K1209247	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 Data Review, June 2008

Please feel free to contact us if you have any questions.

Sincerely,

ERauto

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

EDD Level IV

LDC #28567 (Sealaska-Poulsbo, WA / Adak LTM 2012)

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (8260C)		BTEX (8260B)		PAH (8270D-SIM)		GRO (AK101)		DRO (AK102)																									
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
A	K1208915	10/11/12	11/01/12	3	0	2	4	2	0	5	4	8	0																						
B	K1208971	10/11/12	11/01/12	-	-	3	0	3	0	7	0	7	0																						
C	K1209247	10/11/12	11/01/12	-	-	5	0	-	-	9	0	5	0																						
Total	A/LR			3	0	10	4	5	0	21	4	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67

Shaded cells indicate Level IV validation (all other cells are ADEC Checklist validation). These sample counts do not inclute MS/MSD, and DUPs

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 4 through September 6, 2012

LDC Report Date: November 2, 2012

Matrix: Soil/Sediment/Water

Parameters: Volatiles

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208915

Sample Identification

TB090412
05-735-2012
05-745-2012
TB090612
NL-D-04-2012
NL-D-04S-2012
NL-04-2012
NL-04S-2012
NL-14S-2012
NL-D-04S-2012MS
NL-D-04S-2012MSD

Introduction

This data review covers one soil sample, 5 sediment samples, and 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%.

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 TB090412 and TB090612 were identified as trip blanks. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB090412	9/4/12	Toluene	0.15 ug/L	05-735-2012 05-745-2012 NL-D-04-2012 NL-04-2012
TB090612	9/6/12	Toluene	0.72 mg/Kg	NL-D-04S-2012 NL-04S-2012 NL-14S-2012

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-D-04-2012	Toluene	0.51 ug/L	0.51U ug/L
NL-D-04S-2012	Toluene	0.12 mg/Kg	0.90U mg/Kg

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
NL-D-04S-2012	Bromofluorobenzene	81 (85-120)	All TCL compounds	J (all detects) UJ (all non-detects)	P
NL-04S-2012	Bromofluorobenzene	83 (85-120)	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 not within QC limits. Since there were no associated samples, no data were qualified.

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. 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 05-735-2012 and 05-745-2012 and samples NL-04S-2012 and NL-14S-2012 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	05-735-2012	05-745-2012	
Vinyl chloride	2.7	3.1	14 (≤50)
1,1-Dichloroethene	0.75	0.78	4 (≤50)
trans-1,2-Dichloroethene	13	14	7 (≤50)
cis-1,2-Dichloroethene	240	280	15 (≤50)
Trichloroethene	1.6	1.4	13 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	05-735-2012	05-745-2012	
Tetrachloroethene	0.90	0.78	14 (≤50)

Adak LTM 2012
Volatiles - Data Qualification Summary - SDG K1208915

SDG	Sample	Compound	Flag	A or P	Reason
K1208915	NL-D-04S-2012 NL-04S-2012	All TCL compounds	J (all detects) UJ (all non-detects)	P	Surrogate spikes (%R)

Adak LTM 2012
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1208915

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Field Blank Data Qualification Summary - SDG K1208915

SDG	Sample	Compound	Modified Final Concentration	A or P
K1208915	NL-D-04-2012	Toluene	0.51U ug/L	A
K1208915	NL-D-04S-2012	Toluene	0.90U mg/Kg	A

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208915
Date Collected: 09/04/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: TB090412
Lab Code: K1208915-004

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
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	09/14/12	09/14/12	KWG1210757	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	09/14/12	09/14/12	KWG1210757	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	09/14/12	09/14/12	KWG1210757	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	09/14/12	09/14/12	KWG1210757	
Benzene	ND	U	0.50	0.10	0.062	1	09/14/12	09/14/12	KWG1210757	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	09/14/12	09/14/12	KWG1210757	
Toluene	0.15	J	0.50	0.10	0.054	1	09/14/12	09/14/12	KWG1210757	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	09/14/12	09/14/12	KWG1210757	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/14/12	09/14/12	KWG1210757	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/14/12	09/14/12	KWG1210757	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/14/12	09/14/12	KWG1210757	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	09/14/12	Acceptable
1,2-Dichloroethane-d4	86	70-120	09/14/12	Acceptable
Toluene-d8	98	85-120	09/14/12	Acceptable
4-Bromofluorobenzene	92	75-120	09/14/12	Acceptable

10-Feb/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208915
Date Collected: 09/04/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: 05-735-2012
Lab Code: K1208915-007

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
Vinyl Chloride	**2.7**		0.50	0.10	0.075	1	09/14/12	09/14/12	KWG1210757	
1,1-Dichloroethene	**0.75**		0.50	0.20	0.080	1	09/14/12	09/14/12	KWG1210757	
trans-1,2-Dichloroethene	**13**		0.50	0.20	0.072	1	09/14/12	09/14/12	KWG1210757	
cis-1,2-Dichloroethene	**240**	D	5.0	2.0	0.67	10	09/14/12	09/14/12	KWG1210757	
Trichloroethene (TCE)	**1.6**		0.50	0.10	0.10	1	09/14/12	09/14/12	KWG1210757	
Tetrachloroethene (PCE)	**0.90**		0.50	0.20	0.099	1	09/14/12	09/14/12	KWG1210757	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	90	85-115	09/14/12	Acceptable
1,2-Dichloroethane-d4	83	70-120	09/14/12	Acceptable
Toluene-d8	98	85-120	09/14/12	Acceptable
4-Bromofluorobenzene	93	75-120	09/14/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208915
Date Collected: 09/04/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: 05-745-2012
Lab Code: K1208915-008

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
Vinyl Chloride	**3.1**		0.50	0.10	0.075	1	09/14/12	09/14/12	KWG1210757	
1,1-Dichloroethene	**0.78**		0.50	0.20	0.080	1	09/14/12	09/14/12	KWG1210757	
trans-1,2-Dichloroethene	**14**		0.50	0.20	0.072	1	09/14/12	09/14/12	KWG1210757	
cis-1,2-Dichloroethene	**280**	D	5.0	2.0	0.67	10	09/14/12	09/14/12	KWG1210757	
Trichloroethene (TCE)	**1.4**		0.50	0.10	0.10	1	09/14/12	09/14/12	KWG1210757	
Tetrachloroethene (PCE)	**0.78**		0.50	0.20	0.099	1	09/14/12	09/14/12	KWG1210757	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	85-115	09/14/12	Acceptable
1,2-Dichloroethane-d4	81	70-120	09/14/12	Acceptable
Toluene-d8	97	85-120	09/14/12	Acceptable
4-Bromofluorobenzene	93	75-120	09/14/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/06/2012
Sample Matrix:	Soil	**Date Received:**	09/07/2012

Volatile Organic Compounds

Sample Name:	TB090612	**Units:**	mg/Kg
Lab Code:	K1208915-015	**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	09/20/12	09/20/12	KWG1211036	
Toluene	**0.72**		0.050	0.010	0.0054	1	09/20/12	09/20/12	KWG1211036	
Ethylbenzene	ND	U	0.050	0.010	0.0050	1	09/20/12	09/20/12	KWG1211036	
m,p-Xylenes	ND	U	0.050	0.020	0.011	1	09/20/12	09/20/12	KWG1211036	
o-Xylene	ND	U	0.050	0.020	0.0074	1	09/20/12	09/20/12	KWG1211036	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	91	68-119	09/20/12	Acceptable
1,2-Dichloroethane-d4	86	64-142	09/20/12	Acceptable
Toluene-d8	97	85-115	09/20/12	Acceptable
4-Bromofluorobenzene	96	85-120	09/20/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208915
Date Collected: 09/06/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: NL-D-04-2012
Lab Code: K1208915-016

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	U	0.50	0.10	0.062	1	09/17/12	09/17/12	KWG1210839	
Toluene	**0.51**	u	0.50	0.10	0.054	1	09/17/12	09/17/12	KWG1210839	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/17/12	09/17/12	KWG1210839	
m,p-Xylenes	**0.19**	J	0.50	0.20	0.11	1	09/17/12	09/17/12	KWG1210839	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/17/12	09/17/12	KWG1210839	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	70-120	09/17/12	Acceptable
Dibromofluoromethane	94	85-115	09/17/12	Acceptable
Toluene-d8	99	85-120	09/17/12	Acceptable
4-Bromofluorobenzene	89	75-120	09/17/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/06/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Volatile Organic Compounds

Sample Name:	NL-04-2012	**Units:**	ug/L
Lab Code:	K1208915-018	**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	ND	U	0.50	0.10	0.062	1	09/17/12	09/17/12	KWG1210839	
Toluene	**0.99**		0.50	0.10	0.054	1	09/17/12	09/17/12	KWG1210839	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/17/12	09/17/12	KWG1210839	
m,p-Xylenes	**0.21**	J	0.50	0.20	0.11	1	09/17/12	09/17/12	KWG1210839	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/17/12	09/17/12	KWG1210839	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	70-120	09/17/12	Acceptable
Dibromofluoromethane	92	85-115	09/17/12	Acceptable
Toluene-d8	99	85-120	09/17/12	Acceptable
4-Bromofluorobenzene	91	75-120	09/17/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/06/2012
Sample Matrix:	Sediment	**Date Received:**	09/07/2012

Volatile Organic Compounds

Sample Name:	NL-D-04S-2012	**Units:**	mg/Kg
Lab Code:	K1208915-017	**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	UJ	0.90	0.18	0.12	1	09/20/12	09/20/12	KWG1211036	
Toluene	0.90 U 0.12	J	J	0.90	0.18	0.097	1	09/20/12	09/20/12	KWG1211036	
Ethylbenzene	ND	U	UJ	0.90	0.18	0.090	1	09/20/12	09/20/12	KWG1211036	
m,p-Xylenes	ND	U	↓	0.90	0.36	0.20	1	09/20/12	09/20/12	KWG1211036	
o-Xylene	ND	U	↓	0.90	0.36	0.14	1	09/20/12	09/20/12	KWG1211036	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	68-119	09/20/12	Acceptable
1,2-Dichloroethane-d4	86	64-142	09/20/12	Acceptable
Toluene-d8	98	85-115	09/20/12	Acceptable
4-Bromofluorobenzene	81	85-120	09/20/12	Outside Control Limits

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Sediment

Service Request: K1208915
Date Collected: 09/06/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: NL-04S-2012
Lab Code: K1208915-019

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	UJ	0.67	0.14	0.083	1	09/20/12	09/20/12	KWG1211036	
Toluene	ND	U		0.67	0.14	0.072	1	09/20/12	09/20/12	KWG1211036	
Ethylbenzene	ND	U		0.67	0.14	0.067	1	09/20/12	09/20/12	KWG1211036	
m,p-Xylenes	ND	U		0.67	0.27	0.15	1	09/20/12	09/20/12	KWG1211036	
o-Xylene	ND	U		0.67	0.27	0.099	1	09/20/12	09/20/12	KWG1211036	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	90	68-119	09/20/12	Acceptable
1,2-Dichloroethane-d4	85	64-142	09/20/12	Acceptable
Toluene-d8	97	85-115	09/20/12	Acceptable
4-Bromofluorobenzene	83	85-120	09/20/12	Outside Control Limits

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Sediment

Service Request: K1208915
Date Collected: 09/06/2012
Date Received: 09/07/2012

Volatile Organic Compounds

Sample Name: NL-14S-2012
Lab Code: K1208915-020

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	0.64	0.13	0.079	1	09/20/12	09/20/12	KWG1211036	
Toluene	ND	U	0.64	0.13	0.069	1	09/20/12	09/20/12	KWG1211036	
Ethylbenzene	ND	U	0.64	0.13	0.064	1	09/20/12	09/20/12	KWG1211036	
m,p-Xylenes	ND	U	0.64	0.26	0.14	1	09/20/12	09/20/12	KWG1211036	
o-Xylene	ND	U	0.64	0.26	0.094	1	09/20/12	09/20/12	KWG1211036	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	68-119	09/20/12	Acceptable
1,2-Dichloroethane-d4	86	64-142	09/20/12	Acceptable
Toluene-d8	98	85-115	09/20/12	Acceptable
4-Bromofluorobenzene	91	85-120	09/20/12	Acceptable

10/29/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 6, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208915

Sample Identification

NL-D-04-2012
NL-04-2012

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 target compounds were within 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 difference (%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 semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG1210410-5	9/10/12	Naphthalene	0.0034 ug/L	All samples in SDG K1208915

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.

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1208915

No Sample Data Qualified in this SDG

Adak LTM 2012
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1208915

No Sample Data Qualified in this SDG

Adak LTM 2012
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1208915

No Sample Data Qualified in this SDG

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208915
Date Collected: 09/06/2012
Date Received: 09/07/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: NL-D-04-2012
Lab Code: K1208915-016

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	**0.039**		0.020	0.0050	0.0030	1	09/10/12	09/15/12	KWG1210410	
2-Methylnaphthalene	ND	U	0.020	0.0050	0.0023	1	09/10/12	09/15/12	KWG1210410	
Acenaphthylene	ND	U	0.020	0.0050	0.0034	1	09/10/12	09/15/12	KWG1210410	
Acenaphthene	ND	U	0.020	0.0050	0.0044	1	09/10/12	09/15/12	KWG1210410	
Fluorene	ND	U	0.020	0.0050	0.0038	1	09/10/12	09/15/12	KWG1210410	
Phenanthrene	ND	U	0.020	0.0050	0.0080	1	09/10/12	09/15/12	KWG1210410	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/10/12	09/15/12	KWG1210410	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/10/12	09/15/12	KWG1210410	
Pyrene	ND	U	0.020	0.0050	0.0035	1	09/10/12	09/15/12	KWG1210410	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/15/12	KWG1210410	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/10/12	09/15/12	KWG1210410	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/10/12	09/15/12	KWG1210410	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/15/12	KWG1210410	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/10/12	09/15/12	KWG1210410	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/10/12	09/15/12	KWG1210410	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/10/12	09/15/12	KWG1210410	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/10/12	09/15/12	KWG1210410	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	81	28-98	09/15/12	Acceptable
Fluoranthene-d10	84	31-105	09/15/12	Acceptable
Terphenyl-d14	98	27-112	09/15/12	Acceptable

9/10/2012

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208915
Date Collected: 09/06/2012
Date Received: 09/07/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: NL-04-2012
Lab Code: K1208915-018

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.035**		0.021	0.0052	0.0031	1	09/10/12	09/15/12	KWG1210410	
2-Methylnaphthalene	ND	U	0.021	0.0052	0.0024	1	09/10/12	09/15/12	KWG1210410	
Acenaphthylene	ND	U	0.021	0.0052	0.0035	1	09/10/12	09/15/12	KWG1210410	
Acenaphthene	ND	U	0.021	0.0052	0.0045	1	09/10/12	09/15/12	KWG1210410	
Fluorene	ND	U	0.021	0.0052	0.0039	1	09/10/12	09/15/12	KWG1210410	
Phenanthrene	ND	U	0.021	0.0052	0.0082	1	09/10/12	09/15/12	KWG1210410	
Anthracene	ND	U	0.021	0.0052	0.0037	1	09/10/12	09/15/12	KWG1210410	
Fluoranthene	ND	U	0.021	0.0052	0.0045	1	09/10/12	09/15/12	KWG1210410	
Pyrene	ND	U	0.021	0.0052	0.0036	1	09/10/12	09/15/12	KWG1210410	
Benz(a)anthracene	ND	U	0.021	0.0052	0.0027	1	09/10/12	09/15/12	KWG1210410	
Chrysene	ND	U	0.021	0.0052	0.0035	1	09/10/12	09/15/12	KWG1210410	
Benzo(b)fluoranthene	ND	U	0.021	0.0052	0.0024	1	09/10/12	09/15/12	KWG1210410	
Benzo(k)fluoranthene	ND	U	0.021	0.0052	0.0026	1	09/10/12	09/15/12	KWG1210410	
Benzo(a)pyrene	ND	U	0.021	0.0052	0.0044	1	09/10/12	09/15/12	KWG1210410	
Indeno(1,2,3-cd)pyrene	ND	U	0.021	0.0052	0.0027	1	09/10/12	09/15/12	KWG1210410	
Dibenz(a,h)anthracene	ND	U	0.021	0.0052	0.0026	1	09/10/12	09/15/12	KWG1210410	
Benzo(g,h,i)perylene	ND	U	0.021	0.0052	0.0030	1	09/10/12	09/15/12	KWG1210410	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	82	28-98	09/15/12	Acceptable
Fluoranthene-d10	88	31-105	09/15/12	Acceptable
Terphenyl-d14	110	27-112	09/15/12	Acceptable

10/2/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 5 through September 6, 2012

LDC Report Date: November 2, 2012

Matrix: Soil/Sediment/Water

Parameters: Gasoline Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208915

Sample Identification

TB090512B
14-100-2012
14-110-2012
TB090612
NL-D-04-2012
NL-D-04S-2012
NL-04-2012
NL-04S-2012
NL-14S-2012

Introduction

This data review covers one soil sample, 3 sediment samples, and 5 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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
KWG1210787-5	9/14/12	Gasoline range organics (C6-C10)	15 ug/L	TB090512B 14-100-2012 14-110-2012 NL-D-04-2012 NL-04-2012

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	Reported Concentration	Modified Final Concentration
NL-04-2012	Gasoline range organics (C6-C10)	15 ug/L	100U ug/L

Samples TB090512B and TB090612 were identified as trip blanks. No gasoline range organic contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB090612	9/6/12	Gasoline range organics (C6-C10)	2.2 mg/Kg	NL-D-04S-2012 NL-04S-2012 NL-14S-2012

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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-2012 and NL-14S-2012 were identified as field duplicates. No gasoline range organics were detected in any of the samples.

Adak LTM 2012
Gasoline Range Organics - Data Qualification Summary - SDG K1208915

No Sample Data Qualified in this SDG

Adak LTM 2012
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208915

SDG	Sample	Compound	Modified Final Concentration	A or P
K1208915	NL-04-2012	Gasoline range organics (C6-C10)	100U ug/L	A

Adak LTM 2010
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1208915

No Sample Data Qualified in this SDG

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208915
Date Collected: 09/05/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: TB090512B
Lab Code: K1208915-010

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

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	09/14/12	09/14/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	92	50-150	09/14/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208915
Date Collected: 09/05/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: 14-100-2012
Lab Code: K1208915-013

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**1800**	Y	100	25	13	1	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	88	50-150	09/15/12	Acceptable

10/24/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208915
Date Collected: 09/05/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: 14-110-2012
Lab Code: K1208915-014

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**780**	Y	100	25	13	1	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	89	50-150	09/15/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/06/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Gasoline Range Organics

Sample Name:	NL-D-04-2012	**Units:**	ug/L
Lab Code:	K1208915-016	**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	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	91	50-150	09/15/12	Acceptable

10/29/12

Comments:

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Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/06/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Gasoline Range Organics

Sample Name:	NL-04-2012	**Units:**	ug/L
Lab Code:	K1208915-018	**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	15	J	100U	100	25	13	1	09/15/12	09/15/12	KWG1210787	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	90	50-150	09/15/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/06/2012
Sample Matrix:	Soil	**Date Received:**	09/07/2012

Gasoline Range Organics

Sample Name:	TB090612	**Units:**	mg/Kg
Lab Code:	K1208915-015	**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	**2.2**	J	5.0	2.5	1.5	1	09/06/12	09/17/12	KWG1210932	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	72	50-150	09/17/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55; Adak LTM 2012/14005.055.301
Sample Matrix: Sediment

Service Request: K1208915
Date Collected: 09/06/2012
Date Received: 09/07/2012

Gasoline Range Organics

Sample Name: NL-D-04S-2012
Lab Code: K1208915-017

Extraction Method: EPA 5035A/5030B
Analysis Method: AK101

Units: mg/Kg
Basis: Dry
Level: Med

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	ND	U	90	45	27	1	09/06/12	09/17/12	KWG1210932	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	63	50-150	09/17/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/06/2012
Sample Matrix:	Sediment	**Date Received:**	09/07/2012

Gasoline Range Organics

Sample Name:	NL-04S-2012	**Units:**	mg/Kg
Lab Code:	K1208915-019	**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	67	34	20	1	09/06/12	09/17/12	KWG1210932	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	63	50-150	09/17/12	Acceptable

9/10/2012

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/06/2012
Sample Matrix:	Sediment	**Date Received:**	09/07/2012

Gasoline Range Organics

Sample Name:	NL-14S-2012	**Units:**	mg/Kg
Lab Code:	K1208915-020	**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	63	32	19	1	09/06/12	09/17/12	KWG1210932	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	66	50-150	09/17/12	Acceptable

10/29/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 3 through September 5, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208915

Sample Identification

04-159-2012
04-158-2012
04-173-2012
04-801-2012
SP4-3-2012
R-1-2012
05-375-2012
PP-05-2012

Introduction

This data review covers 8 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Diesel Range Organics - Data Qualification Summary - SDG K1208915

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208915

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1208915

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/03/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	04-159-2012	**Units:**	ug/L
Lab Code:	K1208915-001	**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	**3200**	Y	48	20	11	1	09/11/12	09/15/12	KWG1210414	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/15/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/03/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	04-158-2012	**Units:**	ug/L
Lab Code:	K1208915-002	**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	**8700**	Y	48	20	11	1	09/11/12	09/15/12	KWG1210414	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	90	50-150	09/15/12	Acceptable

9/10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/04/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	04-173-2012	**Units:**	ug/L
Lab Code:	K1208915-003	**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	**3900**	Y	49	20	11	1	09/11/12	09/15/12	KWG1210414	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	85	50-150	09/15/12	Acceptable

9/10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/04/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	04-801-2012	**Units:**	ug/L
Lab Code:	K1208915-005	**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	**16**	J	49	20	11	1	09/11/12	09/15/12	KWG1210414	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	74	50-150	09/15/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/04/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	SP4-3-2012	**Units:**	ug/L
Lab Code:	K1208915-006	**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	**3500**	Y	48	20	11	1	09/11/12	09/15/12	KWG1210414	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	63	50-150	09/15/12	Acceptable

9/10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/04/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	R-1-2012	**Units:**	ug/L
Lab Code:	K1208915-009	**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	**1000**	Y	50	20	11	1	09/11/12	09/15/12	KWG1210414	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/15/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/05/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	05-375-2012	**Units:**	ug/L
Lab Code:	K1208915-011	**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	**600**	Y	49	20	11	1	09/11/12	09/15/12	KWG1210414	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	77	50-150	09/15/12	Acceptable

qc 10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208915
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/05/2012
Sample Matrix:	Water	**Date Received:**	09/07/2012

Diesel Range Organics

Sample Name:	PP-05-2012	**Units:**	ug/L
Lab Code:	K1208915-012	**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	**5200**	Y	50	20	11	1	09/11/12	09/15/12	KWG1210414	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/15/12	Acceptable

10/29/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 8, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208971

Sample Identification

TB090812
MRP-MW2-2012
MRP-MW3-2012

Introduction

This data review covers 3 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 with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Analysis	Required Holding Time (in Days) From Sample Collection Until Analysis	Flag	A or P
MRP-MW2-2012 MRP-MW3-2012	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% 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 TB090812 was identified as a trip blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB090812	9/8/12	Toluene	0.39 ug/L	MRP-MW2-2012 MRP-MW3-2012

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 with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
TB090812	Dibromofluoromethane Toluene-d8	118 (85-115) 126 (85-120)	All TCL compounds	J (all detects)	P

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) 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Volatiles - Data Qualification Summary - SDG K1208971

SDG	Sample	Compound	Flag	A or P	Reason
K1208971	MRP-MW2-2012 MRP-MW3-2012	All TCL compounds	J (all detects) UJ (all non-detects)	A	Technical holding time
K1208971	TB090812	All TCL compounds	J (all detects)	P	Surrogate spikes (%R)

Adak LTM 2012
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Field Blank Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/08/2012
Date Received: 09/10/2012

Volatile Organic Compounds

Sample Name: TB090812
Lab Code: K1208971-011

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
Benzene	ND	U	0.50	0.10	0.062	1	09/18/12	09/18/12	KWG1210913	
Toluene	**0.39**	J J	0.50	0.10	0.054	1	09/18/12	09/18/12	KWG1210913	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/18/12	09/18/12	KWG1210913	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/18/12	09/18/12	KWG1210913	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/18/12	09/18/12	KWG1210913	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	111	70-120	09/18/12	Acceptable
Dibromofluoromethane	118	85-115	09/18/12	Outside Control Limits
Toluene-d8	126	85-120	09/18/12	Outside Control Limits
4-Bromofluorobenzene	105	75-120	09/18/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/08/2012
Date Received: 09/10/2012

Volatile Organic Compounds

Sample Name: MRP-MW2-2012
Lab Code: K1208971-012

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	**35**	J	0.50	0.10	0.062	1	09/24/12	09/24/12	KWG1211182	*
Toluene	**6.9**		0.50	0.10	0.054	1	09/24/12	09/24/12	KWG1211182	*
Ethylbenzene	**130**	D	5.0	1.0	0.50	10	09/24/12	09/24/12	KWG1211182	*
m,p-Xylenes	**650**	D	5.0	2.0	1.1	10	09/24/12	09/24/12	KWG1211182	*
o-Xylene	**7.7**		0.50	0.20	0.074	1	09/24/12	09/24/12	KWG1211182	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	104	70-120	09/24/12	Acceptable
Dibromofluoromethane	107	85-115	09/24/12	Acceptable
Toluene-d8	119	85-120	09/24/12	Acceptable
4-Bromofluorobenzene	110	75-120	09/24/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/08/2012
Date Received: 09/10/2012

Volatile Organic Compounds

Sample Name: MRP-MW3-2012
Lab Code: K1208971-013

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	**0.80**	JD	J	5.0	1.0	0.62	10	09/24/12	09/24/12	KWG1211182	*
Toluene	**230**	D		5.0	1.0	0.54	10	09/24/12	09/24/12	KWG1211182	*
Ethylbenzene	**1900**	D		130	25	13	250	09/24/12	09/24/12	KWG1211182	*
m,p-Xylenes	**8800**	D		130	50	28	250	09/24/12	09/24/12	KWG1211182	*
o-Xylene	**2600**	D		130	50	19	250	09/24/12	09/24/12	KWG1211182	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	99	70-120	09/24/12	Acceptable
Dibromofluoromethane	106	85-115	09/24/12	Acceptable
Toluene-d8	119	85-120	09/24/12	Acceptable
4-Bromofluorobenzene	109	75-120	09/24/12	Acceptable

10/29/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 7 through September 8, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208971

Sample Identification

02-232R-2012
AS-1R-2012
02-231R-2012
AS-1R-2012MS
AS-1R-2012MSD

Introduction

This data review covers 5 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 target compounds were within 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 difference (%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.

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) were not within QC limits. Since the sample concentration was greater than the spiked concentration, no data were qualified.

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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Adak LTM 2012
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Adak LTM 2012
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/07/2012
Date Received: 09/10/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: 02-232R-2012
Lab Code: K1208971-008

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	**2.9**		0.020	0.0050	0.0030	1	09/11/12	09/18/12	KWG1210495	
2-Methylnaphthalene	ND	Ui	0.020	0.0087	0.0087	1	09/11/12	09/18/12	KWG1210495	
Acenaphthylene	ND	Ui	0.11	0.11	0.11	1	09/11/12	09/18/12	KWG1210495	
Acenaphthene	**0.60**		0.020	0.0050	0.0044	1	09/11/12	09/18/12	KWG1210495	
Fluorene	**0.75**		0.020	0.0050	0.0038	1	09/11/12	09/18/12	KWG1210495	
Phenanthrene	**0.71**		0.020	0.0050	0.0080	1	09/11/12	09/18/12	KWG1210495	
Anthracene	**0.065**		0.020	0.0050	0.0036	1	09/11/12	09/18/12	KWG1210495	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/11/12	09/18/12	KWG1210495	
Pyrene	**0.0085**	J	0.020	0.0050	0.0035	1	09/11/12	09/18/12	KWG1210495	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/11/12	09/18/12	KWG1210495	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/11/12	09/18/12	KWG1210495	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/11/12	09/18/12	KWG1210495	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/11/12	09/18/12	KWG1210495	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/11/12	09/18/12	KWG1210495	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/11/12	09/18/12	KWG1210495	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/11/12	09/18/12	KWG1210495	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/11/12	09/18/12	KWG1210495	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	74	28-98	09/18/12	Acceptable
Fluoranthene-d10	83	31-105	09/18/12	Acceptable
Terphenyl-d14	63	27-112	09/18/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/08/2012
Date Received: 09/10/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: AS-1R-2012
Lab Code: K1208971-009

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**55**	JD	0.20	0.050	0.030	10	09/11/12	09/18/12	KWG1210495	
2-Methylnaphthalene	**16**	JD	0.20	0.050	0.023	10	09/11/12	09/18/12	KWG1210495	
Acenaphthylene	ND	Ui	0.042	0.042	0.042	1	09/11/12	09/18/12	KWG1210495	
Acenaphthene	**0.068**	X	0.020	0.0050	0.0044	1	09/11/12	09/18/12	KWG1210495	
Fluorene	**1.2**		0.020	0.0050	0.0038	1	09/11/12	09/18/12	KWG1210495	
Phenanthrene	**1.3**		0.020	0.0050	0.0080	1	09/11/12	09/18/12	KWG1210495	
Anthracene	**0.053**		0.020	0.0050	0.0036	1	09/11/12	09/18/12	KWG1210495	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/11/12	09/18/12	KWG1210495	
Pyrene	**0.0048**	J	0.020	0.0050	0.0035	1	09/11/12	09/18/12	KWG1210495	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/11/12	09/18/12	KWG1210495	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/11/12	09/18/12	KWG1210495	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/11/12	09/18/12	KWG1210495	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/11/12	09/18/12	KWG1210495	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/11/12	09/18/12	KWG1210495	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/11/12	09/18/12	KWG1210495	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/11/12	09/18/12	KWG1210495	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/11/12	09/18/12	KWG1210495	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	76	28-98	09/18/12	Acceptable
Fluoranthene-d10	89	31-105	09/18/12	Acceptable
Terphenyl-d14	77	27-112	09/18/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/08/2012
Date Received: 09/10/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: 02-231R-2012
Lab Code: K1208971-010

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**120**	D	0.40	0.10	0.060	20	09/11/12	09/18/12	KWG1210495	
2-Methylnaphthalene	**67**	D	0.20	0.050	0.023	10	09/11/12	09/18/12	KWG1210495	
Acenaphthylene	ND	Ui	0.19	0.19	0.19	1	09/11/12	09/18/12	KWG1210495	
Acenaphthene	**0.59**		0.020	0.0050	0.0044	1	09/11/12	09/18/12	KWG1210495	
Fluorene	**1.7**		0.020	0.0050	0.0038	1	09/11/12	09/18/12	KWG1210495	
Phenanthrene	**1.3**		0.020	0.0050	0.0080	1	09/11/12	09/18/12	KWG1210495	
Anthracene	**0.068**		0.020	0.0050	0.0036	1	09/11/12	09/18/12	KWG1210495	
Fluoranthene	**0.016**	J	0.020	0.0050	0.0044	1	09/11/12	09/18/12	KWG1210495	
Pyrene	**0.010**	J	0.020	0.0050	0.0035	1	09/11/12	09/18/12	KWG1210495	
Benz(a)anthracene	ND	UX	0.020	0.0050	0.0026	1	09/11/12	09/18/12	KWG1210495	
Chrysene	**0.0075**	JX	0.020	0.0050	0.0034	1	09/11/12	09/18/12	KWG1210495	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/11/12	09/18/12	KWG1210495	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/11/12	09/18/12	KWG1210495	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/11/12	09/18/12	KWG1210495	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/11/12	09/18/12	KWG1210495	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/11/12	09/18/12	KWG1210495	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/11/12	09/18/12	KWG1210495	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	55	28-98	09/18/12	Acceptable
Fluoranthene-d10	88	31-105	09/18/12	Acceptable
Terphenyl-d14	86	27-112	09/18/12	Acceptable

10/29/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 7 through September 8, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Gasoline Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208971

Sample Identification

TB090712A
04-601-2012
04-290-2012
04-306-2012
04-316-2012
MRP-MW2-2012
MRP-MW3-2012

Introduction

This data review covers 7 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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
KWG1211138-5	9/21/12	Gasoline range organics (C6-C10)	18 ug/L	All samples in SDG K1208971

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 TB090712A 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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 04-306-2012 and 04-316-2012 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)
	04-306-2012	04-316-2012	
Gasoline range organics (C6-C10)	670	620	8 (≤50)

Adak LTM 2012
Gasoline Range Organics - Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Adak LTM 2012
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Adak LTM 2010
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208971
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/07/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Gasoline Range Organics

Sample Name:	TB090712A	**Units:**	ug/L
Lab Code:	K1208971-001	**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	09/20/12	09/20/12	KWG1211138	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	88	50-150	09/20/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/07/2012
Date Received: 09/10/2012

Gasoline Range Organics

Sample Name: 04-601-2012
Lab Code: K1208971-002

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

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	09/20/12	09/20/12	KWG1211138	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	91	50-150	09/20/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/07/2012
Date Received: 09/10/2012

Gasoline Range Organics

Sample Name: 04-290-2012
Lab Code: K1208971-003

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
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	09/20/12	09/20/12	KWG1211138	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	84	50-150	09/20/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/07/2012
Date Received: 09/10/2012

Gasoline Range Organics

Sample Name: 04-306-2012
Lab Code: K1208971-005

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**670**	Y	100	25	13	1	09/20/12	09/20/12	KWG1211138	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	85	50-150	09/20/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208971
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/07/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Gasoline Range Organics

Sample Name:	04-316-2012	**Units:**	ug/L
Lab Code:	K1208971-006	**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	**620**	Y	100	25	13	1	09/20/12	09/20/12	KWG1211138	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	88	50-150	09/20/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208971
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/08/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Gasoline Range Organics

Sample Name:	MRP-MW2-2012	**Units:**	ug/L
Lab Code:	K1208971-012	**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	**2900**	Y	100	25	13	1	09/20/12	09/20/12	KWG1211138	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	86	50-150	09/20/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/08/2012
Date Received: 09/10/2012

Gasoline Range Organics

Sample Name: MRP-MW3-2012
Lab Code: K1208971-013

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	**31000**	DY	2500	630	330	25	09/21/12	09/21/12	KWG1211138	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	87	50-150	09/21/12	Acceptable

10/29/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 7 through September 8, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208971

Sample Identification

04-601-2012
04-290-2012
04-300-2012
04-306-2012
04-175-2012
MRP-MW2-2012
MRP-MW3-2012

Introduction

This data review covers 7 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 04-290-2012 and 04-300-2012 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)
	04-290-2012	04-300-2012	
Diesel range organics (C10-C25)	5600	5600	0 (≤50)

Adak LTM 2012
Diesel Range Organics - Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1208971

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208971
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/07/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Diesel Range Organics

Sample Name:	04-601-2012	**Units:**	ug/L
Lab Code:	K1208971-002	**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	**280**	Y	50	20	11	1	09/18/12	09/19/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	78	50-150	09/19/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208971
Date Collected: 09/07/2012
Date Received: 09/10/2012

Diesel Range Organics

Sample Name: 04-290-2012
Lab Code: K1208971-003

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**5600**	Y	50	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	09/20/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208971
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/07/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Diesel Range Organics

Sample Name:	04-300-2012	**Units:**	ug/L
Lab Code:	K1208971-004	**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	**5600**	Y	50	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	89	50-150	09/20/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208971
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/07/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Diesel Range Organics

Sample Name:	04-306-2012	**Units:**	ug/L
Lab Code:	K1208971-005	**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	**4700**	Y	50	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/20/12	Acccptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208971
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/07/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Diesel Range Organics

Sample Name:	04-175-2012	**Units:**	ug/L
Lab Code:	K1208971-007	**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	**5500**	Y	50	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	83	50-150	09/20/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208971
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/08/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Diesel Range Organics

Sample Name:	MRP-MW2-2012	**Units:**	ug/L
Lab Code:	K1208971-012	**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	**890**	L	50	20	11	1	09/18/12	09/19/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	74	50-150	09/19/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208971
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/08/2012
Sample Matrix:	Water	**Date Received:**	09/10/2012

Diesel Range Organics

Sample Name:	MRP-MW3-2012	**Units:**	ug/L
Lab Code:	K1208971-013	**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	**2600**	L	50	20	11	1	09/18/12	09/20/12	KWG1210936	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	73	50-150	09/20/12	Acceptable

10/29/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 10 through September 11, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1209247

Sample Identification

TB091012B
03-895-2012
03-778-2012
03-104-2012
03-502-2012

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%.

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 TB091012B was identified as a trip blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB091012B	9/10/12	Toluene	0.17 ug/L	03-895-2012 03-778-2012 03-104-2012 03-502-2012

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
03-895-2012	Toluene	0.31 ug/L	0.50U ug/L
03-104-2012	Toluene	0.82 ug/L	0.82U 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.

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) 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Volatiles - Data Qualification Summary - SDG K1209247

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1209247

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Field Blank Data Qualification Summary - SDG K1209247

SDG	Sample	Compound	Modified Final Concentration	A or P
K1209247	03-895-2012	Toluene	0.50U ug/L	A
K1209247	03-104-2012	Toluene	0.82U ug/L	A

Client: Sealaska Environmental Services, LLC
Project: TO55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209247
Date Collected: 09/10/2012
Date Received: 09/14/2012

Volatile Organic Compounds

Sample Name: TB091012B
Lab Code: K1209247-001

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	U	0.50	0.10	0.062	1	09/21/12	09/21/12	KWG1211103	
Toluene	**0.17**	J	0.50	0.10	0.054	1	09/21/12	09/21/12	KWG1211103	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/21/12	09/21/12	KWG1211103	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/21/12	09/21/12	KWG1211103	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/21/12	09/21/12	KWG1211103	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	70-120	09/21/12	Acceptable
Dibromofluoromethane	92	85-115	09/21/12	Acceptable
Toluene-d8	98	85-120	09/21/12	Acceptable
4-Bromofluorobenzene	90	75-120	09/21/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209247
Project:	TO55 Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Volatile Organic Compounds

Sample Name:	03-895-2012	**Units:**	ug/L
Lab Code:	K1209247-002	**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	09/21/12	09/21/12	KWG1211103	
Toluene	**0.31**	J 0.504	0.50	0.10	0.054	1	09/21/12	09/21/12	KWG1211103	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/21/12	09/21/12	KWG1211103	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/21/12	09/21/12	KWG1211103	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/21/12	09/21/12	KWG1211103	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	70-120	09/21/12	Acceptable
Dibromofluoromethane	90	85-115	09/21/12	Acceptable
Toluene-d8	97	85-120	09/21/12	Acceptable
4-Bromofluorobenzene	91	75-120	09/21/12	Acceptable

10/1-9/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209247
Date Collected: 09/10/2012
Date Received: 09/14/2012

Volatile Organic Compounds

Sample Name: 03-778-2012
Lab Code: K1209247-003

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	**0.080**	J	0.50	0.10	0.062	1	09/21/12	09/21/12	KWG1211103	
Toluene	**0.95**		0.50	0.10	0.054	1	09/21/12	09/21/12	KWG1211103	
Ethylbenzene	**9.1**		0.50	0.10	0.050	1	09/21/12	09/21/12	KWG1211103	
m,p-Xylenes	**7.2**		0.50	0.20	0.11	1	09/21/12	09/21/12	KWG1211103	
o-Xylene	**5.9**		0.50	0.20	0.074	1	09/21/12	09/21/12	KWG1211103	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	70-120	09/21/12	Acceptable
Dibromofluoromethane	94	85-115	09/21/12	Acceptable
Toluene-d8	98	85-120	09/21/12	Acceptable
4-Bromofluorobenzene	95	75-120	09/21/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209247
Date Collected: 09/10/2012
Date Received: 09/14/2012

Volatile Organic Compounds

Sample Name: 03-104-2012
Lab Code: K1209247-004

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
Benzene	ND	U	0.50	0.10	0.062	1	09/21/12	09/21/12	KWG1211103	
Toluene	**0.82**	J	0.50	0.10	0.054	1	09/21/12	09/21/12	KWG1211103	
Ethylbenzene	**4.0**		0.50	0.10	0.050	1	09/21/12	09/21/12	KWG1211103	
m,p-Xylenes	11		0.50	0.20	0.11	1	09/21/12	09/21/12	KWG1211103	
o-Xylene	**27**		0.50	0.20	0.074	1	09/21/12	09/21/12	KWG1211103	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	85	70-120	09/21/12	Acceptable
Dibromofluoromethane	93	85-115	09/21/12	Acceptable
Toluene-d8	100	85-120	09/21/12	Acceptable
4-Bromofluorobenzene	96	75-120	09/21/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209247
Date Collected: 09/11/2012
Date Received: 09/14/2012

Volatile Organic Compounds

Sample Name: 03-502-2012
Lab Code: K1209247-007

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	U	1.0	0.20	0.13	2	09/21/12	09/21/12	KWG1211103	
Toluene	**5.4**	D	1.0	0.20	0.11	2	09/21/12	09/21/12	KWG1211103	
Ethylbenzene	**66**	D	1.0	0.20	0.10	2	09/21/12	09/21/12	KWG1211103	
m,p-Xylenes	**220**	D	1.0	0.40	0.22	2	09/21/12	09/21/12	KWG1211103	
o-Xylene	**95**	D	1.0	0.40	0.15	2	09/21/12	09/21/12	KWG1211103	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	90	70-120	09/21/12	Acceptable
Dibromofluoromethane	91	85-115	09/21/12	Acceptable
Toluene-d8	99	85-120	09/21/12	Acceptable
4-Bromofluorobenzene	87	75-120	09/21/12	Acceptable

10/29/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 10 through September 11, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Gasoline Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1209247

Sample Identification

TB091012B
03-895-2012
03-778-2012
03-104-2012
03-502-2012
03-895-2012MS
03-895-2012MSD
03-778-2012MS
03-778-2012MSD

Introduction

This data review covers 9 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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
KWG1211138-5	9/21/12	Gasoline range organics (C6-C10)	18 ug/L	03-895-2012
KWG1211221-5	9/22/12	Gasoline range organics (C6-C10)	14 ug/L	TB091012B 03-778-2012 03-104-2012 03-502-2012

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	Reported Concentration	Modified Final Concentration
03-895-2012	Gasoline range organics (C6-C10)	18 ug/L	100U ug/L

Sample TB091012B 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 with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
03-778-2012MS/MSD (03-778-2012)	Gasoline range organics (C6-C10)	69 (70-120)	-	-	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Gasoline Range Organics - Data Qualification Summary - SDG K1209247

SDG	Sample	Compound	Flag	A or P	Reason
K1209247	03-778-2012	Gasoline range organics (C6-C10)	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)

Adak LTM 2012
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1209247

SDG	Sample	Compound	Modified Final Concentration	A or P
K1209247	03-895-2012	Gasoline range organics (C6-C10)	100U ug/L	A

Adak LTM 2010
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1209247

No Sample Data Qualified in this SDG

Client: Sealaska Environmental Services, LLC
Project: TO55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209247
Date Collected: 09/10/2012
Date Received: 09/14/2012

Gasoline Range Organics

Sample Name: TB091012B
Lab Code: K1209247-001

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

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	09/21/12	09/21/12	KWG1211221	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	90	50-150	09/21/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209247
Date Collected: 09/10/2012
Date Received: 09/14/2012

Gasoline Range Organics

Sample Name: 03-895-2012
Lab Code: K1209247-002

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	18	J	100 U	100	25	13	1	09/21/12	09/21/12	KWG1211138	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	89	50-150	09/21/12	Acceptable

10/2/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209247
Date Collected: 09/10/2012
Date Received: 09/14/2012

Gasoline Range Organics

Sample Name: 03-778-2012
Lab Code: K1209247-003

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	120	H J	100	25	13	1	09/21/12	09/21/12	KWG1211221	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	87	50-150	09/21/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209247
Date Collected: 09/10/2012
Date Received: 09/14/2012

Gasoline Range Organics

Sample Name: 03-104-2012
Lab Code: K1209247-004

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**200**	H	100	25	13	1	09/21/12	09/21/12	KWG1211221	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	88	50-150	09/21/12	Acceptable

10/29/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209247
Date Collected: 09/11/2012
Date Received: 09/14/2012

Gasoline Range Organics

Sample Name: 03-502-2012
Lab Code: K1209247-007

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**3400**	Y	100	25	13	1	09/21/12	09/21/12	KWG1211221	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	86	50-150	09/21/12	Acceptable

10/2/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 10 through September 11, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1209247

Sample Identification

03-895-2012
03-778-2012
03-104-2012
RW-303-14-2012
MW-146-1-2012
03-502-2012
RW-303-16-2012
MW-303-7-2012
03-898-2012

Introduction

This data review covers 9 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Diesel Range Organics - Data Qualification Summary - SDG K1209247

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1209247

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1209247

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209247
Project:	TO55 Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	03-895-2012	**Units:**	ug/L
Lab Code:	K1209247-002	**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	15	J	49	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	79	50-150	09/22/12	Acceptable

10/09/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209247
Project:	TO55 Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	03-778-2012	**Units:**	ug/L
Lab Code:	K1209247-003	**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	**1600**	Y	49	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	87	50-150	09/22/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209247
Project:	TO55 Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	03-104-2012	**Units:**	ug/L
Lab Code:	K1209247-004	**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	**4900**	Y	50	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	96	50-150	09/22/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209247
Project:	TO55 Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	RW-303-14-2012	**Units:**	ug/L
Lab Code:	K1209247-005	**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	**570**	Y	49	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	82	50-150	09/22/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209247
Project:	TO55 Adak LTM 2012/14005.055.301	**Date Collected:**	09/10/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	MW-146-1-2012	**Units:**	ug/L
Lab Code:	K1209247-006	**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	**7700**	Y	50	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	98	50-150	09/22/12	Acceptable

10/9/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209247
Project:	TO55 Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	03-502-2012	**Units:**	ug/L
Lab Code:	K1209247-007	**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	**1300**	L	50	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	09/22/12	Acceptable

9/10/09/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1209247
Date Collected: 09/11/2012
Date Received: 09/14/2012

Diesel Range Organics

Sample Name: RW-303-16-2012
Lab Code: K1209247-008

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA
Level: Low

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	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	50-150	09/22/12	Acceptable

10/29/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209247
Project:	TO55 Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	MW-303-7-2012	**Units:**	ug/L
Lab Code:	K1209247-009	**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	**14000**	Y	49	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	96	50-150	09/22/12	Acceptable

10/3/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1209247
Project:	TO55 Adak LTM 2012/14005.055.301	**Date Collected:**	09/11/2012
Sample Matrix:	Water	**Date Received:**	09/14/2012

Diesel Range Organics

Sample Name:	03-898-2012	**Units:**	ug/L
Lab Code:	K1209247-010	**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	**110**	Y	50	20	11	1	09/20/12	09/22/12	KWG1211132	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	85	50-150	09/22/12	Acceptable

10/29/12

Comments:

Laboratory Data Consultants, Inc.

7750 El Camino Real, Ste. 2L Carlsbad, CA 92009

Phone 760.634.0437 **Web** www.lab-data.com **Fax** 760.634.0439

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 2, 2012

SUBJECT: Revised ADAK LTM 2012, Data Validation

Dear Ms. Wunderlich,

Enclosed is the revised data validation report for the fractions listed below. Please replace the previously submitted report with the enclosed revised report.

LDC Project # 28601:

SDG #	Fraction
K1208738	Volatiles, Polynuclear Aromatic Hydrocarbons, 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 Data Review, June 2008

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

EDD Level IV

LDC #28601 (Sealaska-Poulsbo, WA / Adak LTM 2012)

LDC	SDG#	DATE REC'D	(3) DATE DUE	BTEX (8260B)		PAHs (8270D-SIM)		DRO (AK102)																															
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	K1208738	10/18/12	11/08/12	2	0	1	1	4	1																														
Total	T/LR			2	0	1	1	4	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	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

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 1, 2012

LDC Report Date: November 2, 2012

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208738

Sample Identification

TB090112
NL-08-2012

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.

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 with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/8/12	Toluene	20.4	All samples in SDG K1208738	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.

Sample TB090112 was identified a trip blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB090112	9/1/12	Toluene	0.21 ug/L	NL-08-2012

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-08-2012	Toluene	0.77 ug/L	0.77U 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.

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. 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Volatiles - Data Qualification Summary - SDG K1208738

SDG	Sample	Compound	Flag	A or P	Reason
K1208738	TB090112 NL-08-2012	Toluene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

Adak LTM 2012
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1208738

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Field Blank Data Qualification Summary - SDG K1208738

SDG	Sample	Compound	Modified Final Concentration	A or P
K1208738	NL-08-2012	Toluene	0.77U ug/L	A

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/01/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Volatile Organic Compounds

Sample Name:	TB090112	**Units:**	ug/L
Lab Code:	K1208738-004	**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	09/08/12	09/08/12	KWG1210395	
Toluene	0.21	J	J	0.50	0.10	0.054	1	09/08/12	09/08/12	KWG1210395	*
Ethylbenzene	ND	U		0.50	0.10	0.050	1	09/08/12	09/08/12	KWG1210395	
m,p-Xylenes	ND	U		0.50	0.20	0.11	1	09/08/12	09/08/12	KWG1210395	
o-Xylene	ND	U		0.50	0.20	0.074	1	09/08/12	09/08/12	KWG1210395	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	95	70-120	09/08/12	Acceptable
Dibromofluoromethane	107	85-115	09/08/12	Acceptable
Toluene-d8	117	85-120	09/08/12	Acceptable
4-Bromofluorobenzene	101	75-120	09/08/12	Acceptable

9/10/2012

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55, Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208738
Date Collected: 09/01/2012
Date Received: 09/04/2012

Volatile Organic Compounds

Sample Name: NL-08-2012
Lab Code: K1208738-006

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	0.86		0.50	0.10	0.062	1	09/08/12	09/08/12	KWG1210395	
Toluene	0.77	UJ	0.50	0.10	0.054	1	09/08/12	09/08/12	KWG1210395	*
Ethylbenzene	1.3		0.50	0.10	0.050	1	09/08/12	09/08/12	KWG1210395	
m,p-Xylenes	1.1		0.50	0.20	0.11	1	09/08/12	09/08/12	KWG1210395	
o-Xylene	0.17	J	0.50	0.20	0.074	1	09/08/12	09/08/12	KWG1210395	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	70-120	09/08/12	Acceptable
Dibromofluoromethane	106	85-115	09/08/12	Acceptable
Toluene-d8	118	85-120	09/08/12	Acceptable
4-Bromofluorobenzene	105	75-120	09/08/12	Acceptable

10/30/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: September 1, 2012

LDC Report Date: November 2, 2012

Matrix: Soil/Water

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208738

Sample Identification

NL-08S-2012
NL-08-2012
NL-08S-2012MS
NL-08S-2012MSD

Introduction

This data review covers 3 soil samples and one water sample 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 target compounds were within 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 difference (%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 total petroleum hydrocarbons as gasoline contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
KWG1210256-5	9/11/12	Benzo(a)anthracene	0.0036 ug/L	All water samples in SDG K1208738

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

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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 2012
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1208738

No Sample Data Qualified in this SDG

Adak LTM 2012
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1208738

No Sample Data Qualified in this SDG

Adak LTM 2012
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1208738

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/01/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Polynuclear Aromatic Hydrocarbons

Sample Name:	NL-08-2012	**Units:**	ug/L
Lab Code:	K1208738-006	**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	**0.0083**	J	0.020	0.0050	0.0030	1	09/06/12	09/12/12	KWG1210256	
2-Methylnaphthalene	ND	U	0.020	0.0050	0.0023	1	09/06/12	09/12/12	KWG1210256	
Acenaphthylene	ND	U	0.020	0.0050	0.0034	1	09/06/12	09/12/12	KWG1210256	
Acenaphthene	ND	U	0.020	0.0050	0.0044	1	09/06/12	09/12/12	KWG1210256	
Fluorene	ND	U	0.020	0.0050	0.0038	1	09/06/12	09/12/12	KWG1210256	
Phenanthrene	ND	U	0.020	0.0050	0.0080	1	09/06/12	09/12/12	KWG1210256	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/06/12	09/12/12	KWG1210256	
Fluoranthene	ND	U	0.020	0.0050	0.0044	1	09/06/12	09/12/12	KWG1210256	
Pyrene	ND	U	0.020	0.0050	0.0035	1	09/06/12	09/12/12	KWG1210256	
Benz(a)anthracene	ND	U	0.020	0.0050	0.0026	1	09/06/12	09/12/12	KWG1210256	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/06/12	09/12/12	KWG1210256	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/06/12	09/12/12	KWG1210256	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/06/12	09/12/12	KWG1210256	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/06/12	09/12/12	KWG1210256	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/06/12	09/12/12	KWG1210256	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/06/12	09/12/12	KWG1210256	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/06/12	09/12/12	KWG1210256	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	28-98	09/12/12	Acceptable
Fluoranthene-d10	92	31-105	09/12/12	Acceptable
Terphenyl-d14	97	27-112	09/12/12	Acceptable

10/30/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/01/2012
Sample Matrix:	Soil	**Date Received:**	09/04/2012

Polynuclear Aromatic Hydrocarbons

Sample Name:	NL-08S-2012	**Units:**	ug/Kg
Lab Code:	K1208738-005	**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	**1.1**	J	5.0	1.0	0.60	1	09/13/12	09/17/12	KWG1210636	
2-Methylnaphthalene	ND	U	5.0	1.0	0.58	1	09/13/12	09/17/12	KWG1210636	
Acenaphthylene	ND	U	5.0	1.0	0.56	1	09/13/12	09/17/12	KWG1210636	
Acenaphthene	ND	U	5.0	1.0	0.50	1	09/13/12	09/17/12	KWG1210636	
Fluorene	ND	U	5.0	1.0	0.61	1	09/13/12	09/17/12	KWG1210636	
Phenanthrene	**3.0**	J	5.0	1.0	1.4	1	09/13/12	09/17/12	KWG1210636	
Anthracene	**1.2**	J	5.0	1.0	0.55	1	09/13/12	09/17/12	KWG1210636	
Fluoranthene	**8.0**		5.0	1.0	0.98	1	09/13/12	09/17/12	KWG1210636	
Pyrene	**6.7**		5.0	1.0	0.76	1	09/13/12	09/17/12	KWG1210636	
Benz(a)anthracene	**4.3**	J	5.0	1.0	0.72	1	09/13/12	09/17/12	KWG1210636	
Chrysene	**6.0**		5.0	1.0	0.80	1	09/13/12	09/17/12	KWG1210636	
Benzo(b)fluoranthene	**7.4**		5.0	1.0	0.92	1	09/13/12	09/17/12	KWG1210636	
Benzo(k)fluoranthene	**2.8**	J	5.0	1.0	0.87	1	09/13/12	09/17/12	KWG1210636	
Benzo(a)pyrene	**5.7**		5.0	1.0	0.99	1	09/13/12	09/17/12	KWG1210636	
Indeno(1,2,3-cd)pyrene	**5.6**		5.0	1.0	0.87	1	09/13/12	09/17/12	KWG1210636	
Dibenz(a,h)anthracene	**1.4**	J	5.0	1.0	0.80	1	09/13/12	09/17/12	KWG1210636	
Benzo(g,h,i)perylene	**6.5**		5.0	1.0	0.85	1	09/13/12	09/17/12	KWG1210636	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	63	17-104	09/17/12	Acceptable
Fluoranthene-d10	78	27-106	09/17/12	Acceptable
Terphenyl-d14	82	35-109	09/17/12	Acceptable

10/20/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 31 through September 1, 2012

LDC Report Date: November 2, 2012

Matrix: Soil/Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208738

Sample Identification

12-114-2012
12-105-2012
12-203-2012
NL-08S-2012
NL-08-2012
NL-08-2012MS
NL-08-2012MSD
12-114-2012RX
12-105-2012RX
12-203-2012RX
NL-08-2012RX
NL-08-2012MSRX
NL-08-2012MSDRX

Samples appended with RX were re-extracted.

Introduction

This data review covers one soil sample and 12 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
12-114-2012RX 12-105-2012RX 12-203-2012RX	Diesel range organics (C10-C25)	25	14	J (all detects) UJ (all non-detects)	A
NL-08-2012RX NL-08-2012MSRX NL-08-2012MSDRX	Diesel range organics (C10-C25)	24	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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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 not within QC limits. Since there were no associated samples, no data were qualified.

VII. Laboratory Control Samples

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
KWG1210265-5/6 (12-114-2012 12-105-2012 12-203-2012 NL-08-2012 KWG1210265-7)	Diesel range organics (C10-C25)	69 (75-125)	-	-	J (all detects) UJ (all non-detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and LOQs/LODs

All compound quantitation and LOQs/LODs 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
12-114-2012RX 12-105-2012RX 12-203-2012RX NL-08-2012RX	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

No field duplicates were identified in this SDG.

Adak LTM 2012
Diesel Range Organics - Data Qualification Summary - SDG K1208738

SDG	Sample	Compound	Flag	A or P	Reason
K1208738	12-114-2012RX 12-105-2012RX 12-203-2012RX NL-08-2012RX	Diesel range organics (C10-C25)	J (all detects) UJ (all non-detects)	A	Technical holding times
K1208738	12-114-2012 12-105-2012 12-203-2012 NL-08-2012	Diesel range organics (C10-C25)	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)
K1208738	12-114-2012RX 12-105-2012RX 12-203-2012RX NL-08-2012RX	Diesel range organics (C10-C25)	R	A	Overall assessment

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208738

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1208738

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	12-114-2012	**Units:**	ug/L
Lab Code:	K1208738-001	**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	**1700**	Y	J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	79	50-150	09/19/12	Acceptable

10/30/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	12-105-2012	**Units:**	ug/L
Lab Code:	K1208738-002	**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	**7300**	Y	J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	09/19/12	Acceptable

10/30/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	12-203-2012	**Units:**	ug/L
Lab Code:	K1208738-003	**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	**14000**	Y J	49	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	80	50-150	09/19/12	Acceptable

10/30/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/01/2012
Sample Matrix:	Soil	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	NL-08S-2012	**Units:**	mg/Kg
Lab Code:	K1208738-005	**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	48	24	9.3	5	09/10/12	09/12/12	KWG1210331	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	93	50-150	09/12/12	Acceptable

10/30/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/01/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	NL-08-2012	**Units:**	ug/L
Lab Code:	K1208738-006	**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 J	50	20	11	1	09/06/12	09/19/12	KWG1210265	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	77	50-150	09/19/12	Acceptable

10/30/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	12-114-2012	**Units:**	ug/L
Lab Code:	K1208738-001	**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	1700	Y	R	49	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	96	50-150	09/27/12	Acceptable

10/30/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	12-105-2012	**Units:**	ug/L
Lab Code:	K1208738-002	**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	7300	Y R	50	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	108	50-150	09/27/12	Acceptable

10/30/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	08/31/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	12-203-2012	**Units:**	ug/L
Lab Code:	K1208738-003	**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	**14000**	Y R	50	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	107	50-150	09/27/12	Acceptable

10/30/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208738
Project:	TO 55, Adak LTM 2012/14005.055.301	**Date Collected:**	09/01/2012
Sample Matrix:	Water	**Date Received:**	09/04/2012

Diesel Range Organics

Sample Name:	NL-08-2012	**Units:**	ug/L
Lab Code:	K1208738-006	**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	150	Y R	50	20	11	1	09/25/12	09/27/12	KWG1211371	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	101	50-150	09/27/12	Acceptable

10/30/12

Comments:

Laboratory Data Consultants, Inc.

7750 El Camino Real, Ste. 2L Carlsbad, CA 92009

Phone 760.634.0437 **Web** www.lab-data.com **Fax** 760.634.0439

Sealaska Environmental Services
PO BOX 869
Marine Science Center, 2nd Floor
18743 Front Street NE
Poulsbo, WA 98370
ATTN: Ms. Sherri Wunderlich

November 12, 2012

SUBJECT: ADAK LTM 2012, 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 22, 2012. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 28622:

SDG #	Fraction
K1208653	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,

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

EDD Level IV

LDC #28622 (Sealaska-Poulsbo, WA / Adak LTM 2012)

LDC	SDG#	DATE REC'D	(3) DATE DUE	BTEX (8260B)		PAHs (8270D-SIM)		GRO (AK101)		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	K1208653	10/22/12	11/12/12	13	0	4	5	9	0	15	5																										
Total	T/LR			13	0	4	5	9	0	15	5	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	51

Shaded cells indicate Level IV validation (all other cells are ADEC Checklist validation). These sample counts do not inclute MS/MSD, and DUPs

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 28 through August 30, 2012

LDC Report Date: November 8, 2012

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208653

Sample Identification

TB082812A
NSWSD-7-2012
NSWSD-17-2012
NSWSD-8-2012
852-2012
02-817-2012
02-461-2012
02-453-2012
NMCB-04-2012
02-452-2012
NMCB-08-2012
NMCB-18-2012
E-201-2012
NSWSD-8-2012MS
NSWSD-8-2012MSD

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 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%.

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 TB082812A was identified as a trip blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB082812A	8/28/12	Toluene	0.18 ug/L	NSWSD-7-2012 NSWSD-17-2012 NSWSD-8-2012 852-2012 02-817-2012 02-461-2012 02-453-2012 NMCB-04-2012 02-452-2012 NMCB-08-2012 NMCB-18-2012 E-201-2012

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
NSWSD-7-2012	Toluene	0.50 ug/L	0.50U ug/L
NSWSD-17-2012	Toluene	0.46 ug/L	0.50U ug/L
NSWSD-8-2012	Toluene	0.24 ug/L	0.50U ug/L
852-2012	Toluene	0.25 ug/L	0.50U 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
02-817-2012	Toluene-d8	130 (85-120)	All TCL compounds	J (all detects)	P
02-461-2012	Toluene-d8	131 (85-120)	All TCL compounds	J (all detects)	P
02-453-2012	Toluene-d8	125 (85-120)	All TCL compounds	J (all detects)	P
NMCB-04-2012	Toluene-d8	128 (85-120)	All TCL compounds	J (all detects)	P
02-452-2012	Toluene-d8	130 (85-120)	All TCL compounds	J (all detects)	P

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
NMCB-08-2012	Toluene-d8	124 (85-120)	All TCL compounds	J (all detects)	P
NMCB-18-2012	Toluene-d8	124 (85-120)	All TCL compounds	J (all detects)	P
E-201-2012	Toluene-d8	136 (85-120)	All TCL compounds	J (all 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) 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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 NSWSD-7-2012 and NSWSD-17-2012 and samples NMCB-08-2012 and NMCB-18-2012 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	NSWSD-7-2012	NSWSD-17-2012	
Benzene	0.37	0.080	129 (≤50)
Toluene	0.50	0.46	8 (≤50)
Ethylbenzene	0.060	0.50U	200 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	NMCB-08-2012	NMCB-18-2012	
Benzene	29	29	0 (≤50)

Adak LTM 2012
Volatiles - Data Qualification Summary - SDG K1208653

SDG	Sample	Compound	Flag	A or P	Reason
K1208653	02-817-2012 02-461-2012 02-453-2012 NMCB-04-2012 02-452-2012 NMCB-08-2012 NMCB-18-2012 E-201-2012	All TCL compounds	J (all detects)	P	Surrogate spikes (%R)

Adak LTM 2012
Volatiles - Laboratory Blank Data Qualification Summary - SDG K1208653

No Sample Data Qualified in this SDG

Adak LTM 2012
Volatiles - Field Blank Data Qualification Summary - SDG K1208653

SDG	Sample	Compound	Modified Final Concentration	A or P
K1208653	NSWSD-7-2012	Toluene	0.50U ug/L	A
K1208653	NSWSD-17-2012	Toluene	0.50U ug/L	A
K1208653	NSWSD-8-2012	Toluene	0.50U ug/L	A
K1208653	852-2012	Toluene	0.50U ug/L	A

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	TB082812A	**Units:**	ug/L
Lab Code:	K1208653-004	**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	09/07/12	09/07/12	KWG1210323	
Toluene	**0.18**	J	0.50	0.10	0.054	1	09/07/12	09/07/12	KWG1210323	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/07/12	09/07/12	KWG1210323	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/07/12	09/07/12	KWG1210323	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/07/12	09/07/12	KWG1210323	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	70-120	09/07/12	Acceptable
Dibromofluoromethane	111	85-115	09/07/12	Acceptable
Toluene-d8	117	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	101	75-120	09/07/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Volatile Organic Compounds

Sample Name: NSWSD-7-2012
Lab Code: K1208653-005

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	**0.37**	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210323	
Toluene	**0.50**	U	0.50	0.10	0.054	1	09/07/12	09/07/12	KWG1210323	
Ethylbenzene	**0.060**	J	0.50	0.10	0.050	1	09/07/12	09/07/12	KWG1210323	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/07/12	09/07/12	KWG1210323	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/07/12	09/07/12	KWG1210323	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	92	70-120	09/07/12	Acceptable
Dibromofluoromethane	105	85-115	09/07/12	Acceptable
Toluene-d8	115	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	102	75-120	09/07/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Volatile Organic Compounds

Sample Name: NSWSD-17-2012
Lab Code: K1208653-006

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	**0.080**	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	
Toluene	**0.46**	J 0.50U	0.50	0.10	0.054	1	09/07/12	09/07/12	KWG1210370	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/07/12	09/07/12	KWG1210370	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/07/12	09/07/12	KWG1210370	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	94	70-120	09/07/12	Acceptable
Dibromofluoromethane	106	85-115	09/07/12	Acceptable
Toluene-d8	117	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	102	75-120	09/07/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	NSWSD-8-2012	**Units:**	ug/L
Lab Code:	K1208653-012	**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	ND	U	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210323	
Toluene	**0.24**	J 0.504	0.50	0.10	0.054	1	09/07/12	09/07/12	KWG1210323	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/07/12	09/07/12	KWG1210323	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/07/12	09/07/12	KWG1210323	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/07/12	09/07/12	KWG1210323	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	70-120	09/07/12	Acceptable
Dibromofluoromethane	106	85-115	09/07/12	Acceptable
Toluene-d8	117	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	103	75-120	09/07/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	852-2012	**Units:**	ug/L
Lab Code:	K1208653-014	**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	ND	U	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	
Toluene	**0.25**	J 0.50U	0.50	0.10	0.054	1	09/07/12	09/07/12	KWG1210370	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	09/07/12	09/07/12	KWG1210370	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	09/07/12	09/07/12	KWG1210370	
o-Xylene	ND	U	0.50	0.20	0.074	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	70-120	09/07/12	Acceptable
Dibromofluoromethane	106	85-115	09/07/12	Acceptable
Toluene-d8	116	85-120	09/07/12	Acceptable
4-Bromofluorobenzene	102	75-120	09/07/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	02-817-2012	**Units:**	ug/L
Lab Code:	K1208653-016	**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	5.5	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	70-120	09/07/12	Acceptable
Dibromofluoromethane	105	85-115	09/07/12	Acceptable
Toluene-d8	130	85-120	09/07/12	Outside Control Limits
4-Bromofluorobenzene	108	75-120	09/07/12	Acceptable

9/18/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	02-461-2012	**Units:**	ug/L
Lab Code:	K1208653-017	**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	1.4	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	90	70-120	09/07/12	Acceptable
Dibromofluoromethane	105	85-115	09/07/12	Acceptable
Toluene-d8	131	85-120	09/07/12	Outside Control Limits
4-Bromofluorobenzene	108	75-120	09/07/12	Acceptable

9/18/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	02-453-2012	**Units:**	ug/L
Lab Code:	K1208653-018	**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	6.6	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	92	70-120	09/07/12	Acceptable
Dibromofluoromethane	102	85-115	09/07/12	Acceptable
Toluene-d8	125	85-120	09/07/12	Outside Control Limits
4-Bromofluorobenzene	117	75-120	09/07/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/29/2012
Date Received: 08/31/2012

Volatile Organic Compounds

Sample Name: NMCB-04-2012
Lab Code: K1208653-019

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	**0.23**	J	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	92	70-120	09/07/12	Acceptable
Dibromofluoromethane	105	85-115	09/07/12	Acceptable
Toluene-d8	128	85-120	09/07/12	Outside Control Limits
4-Bromofluorobenzene	111	75-120	09/07/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/29/2012
Date Received: 08/31/2012

Volatile Organic Compounds

Sample Name: 02-452-2012
Lab Code: K1208653-020

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	**0.10**	J	J	0.50	0.10	0.062	1	09/07/12	09/07/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	92	70-120	09/07/12	Acceptable
Dibromofluoromethane	104	85-115	09/07/12	Acceptable
Toluene-d8	130	85-120	09/07/12	Outside Control Limits
4-Bromofluorobenzene	118	75-120	09/07/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/30/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	NMCB-08-2012	**Units:**	ug/L
Lab Code:	K1208653-022	**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	29	J	0.50	0.10	0.062	1	09/07/12	09/08/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	70-120	09/08/12	Acceptable
Dibromofluoromethane	105	85-115	09/08/12	Acceptable
Toluene-d8	124	85-120	09/08/12	Outside Control Limits
4-Bromofluorobenzene	116	75-120	09/08/12	Acceptable

9/18/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/30/2012
Date Received: 08/31/2012

Volatile Organic Compounds

Sample Name: NMCB-18-2012
Lab Code: K1208653-023

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	29	J	0.50	0.10	0.062	1	09/07/12	09/08/12	KWG1210370	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	70-120	09/08/12	Acceptable
Dibromofluoromethane	104	85-115	09/08/12	Acceptable
Toluene-d8	124	85-120	09/08/12	Outside Control Limits
4-Bromofluorobenzene	113	75-120	09/08/12	Acceptable

9/11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/30/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Volatile Organic Compounds

Sample Name:	E-201-2012	**Units:**	ug/L
Lab Code:	K1208653-024	**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	09/08/12	09/08/12	KWG1210395	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	89	70-120	09/08/12	Acceptable
Dibromofluoromethane	103	85-115	09/08/12	Acceptable
Toluene-d8	136	85-120	09/08/12	Outside Control Limits
4-Bromofluorobenzene	108	75-120	09/08/12	Acceptable

9/11/8/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 28, 2012

LDC Report Date: November 5, 2012

Matrix: Sediment/Water

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208653

Sample Identification

NSWSD-7-2012
NSWSD-17-2012
NSWSD-5S-2012
NSWSD-4S-2012
NSWSD-14S-2012
NSWSD-2S-2012
NSWSD-8-2012
852S-2012
852-2012
NSWSD-5S-2012MS
NSWSD-5S-2012MSD

Introduction

This data review covers 7 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 target compounds were within 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 difference (%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.

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 LOQs/LODs

All compound quantitation and LOQs/LODs 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 NSWSD-7-2012 and NSWSD-17-2012 and samples NSWSD-4S-2012 and NSWSD-14S-2012 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)
	NSWSD-7-2012	NSWSD-17-2012	
Naphthalene	0.029	0.027	7 (≤50)
2-Methylnaphthalene	0.0077	0.0073	5 (≤50)
Acenaphthene	0.015	0.014	7 (≤50)
Fluorene	0.010	0.0094	6 (≤50)
Phenanthrene	0.0089	0.0084	6 (≤50)
Fluoranthene	0.011	0.011	0 (≤50)
Benzo(a)anthracene	0.0035	0.0036	3 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	NSWSD-4S-2012	NSWSD-14S-2012	
Acenaphthylene	0.74	3.3U	200 (≤50)
Acenaphthene	0.86	0.53	47 (≤50)
Fluorene	1.0	3.3U	200 (≤50)
Phenanthrene	5.0	3.3U	200 (≤50)
Anthracene	0.84	3.3U	200 (≤50)
Fluoranthene	9.6	2.1	128 (≤50)
Pyrene	12	3.3	114 (≤50)
Benzo(a)anthracene	2.6	3.3U	200 (≤50)
Chrysene	1.8	3.3U	200 (≤50)
Benzo(b)fluoranthene	6.0	2.0	100 (≤50)
Benzo(k)fluoranthene	2.3	3.3U	200 (≤50)
Benzo(a)pyrene	3.4	3.3U	200 (≤50)
Indeno(1,2,3-cd)pyrene	3.3	1.4	81 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	NSWSD-4S-2012	NSWSD-14S-2012	
Benzo(g,h,i)perylene	5.0	2.0	86 (≤50)

Adak LTM 2012
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K1208653

No Sample Data Qualified in this SDG

Adak LTM 2012
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K1208653

No Sample Data Qualified in this SDG

Adak LTM 2012
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K1208653

No Sample Data Qualified in this SDG

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: NSWSD-7-2012
Lab Code: K1208653-005

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.029**		0.021	0.0051	0.0031	1	09/04/12	09/08/12	KWG1210141	
2-Methylnaphthalene	**0.0077**	J	0.021	0.0051	0.0024	1	09/04/12	09/08/12	KWG1210141	
Acenaphthylene	ND	U	0.021	0.0051	0.0035	1	09/04/12	09/08/12	KWG1210141	
Acenaphthene	**0.015**	J	0.021	0.0051	0.0045	1	09/04/12	09/08/12	KWG1210141	
Fluorene	**0.010**	J	0.021	0.0051	0.0039	1	09/04/12	09/08/12	KWG1210141	
Phenanthrene	**0.0089**	J	0.021	0.0051	0.0081	1	09/04/12	09/08/12	KWG1210141	
Anthracene	ND	U	0.021	0.0051	0.0037	1	09/04/12	09/08/12	KWG1210141	
Fluoranthene	**0.011**	J	0.021	0.0051	0.0045	1	09/04/12	09/08/12	KWG1210141	
Pyrene	ND	Ui	0.021	0.0079	0.0079	1	09/04/12	09/08/12	KWG1210141	
Benz(a)anthracene	**0.0035**	J	0.021	0.0051	0.0027	1	09/04/12	09/08/12	KWG1210141	
Chrysene	ND	U	0.021	0.0051	0.0035	1	09/04/12	09/08/12	KWG1210141	
Benzo(b)fluoranthene	ND	U	0.021	0.0051	0.0024	1	09/04/12	09/08/12	KWG1210141	
Benzo(k)fluoranthene	ND	U	0.021	0.0051	0.0026	1	09/04/12	09/08/12	KWG1210141	
Benzo(a)pyrene	ND	U	0.021	0.0051	0.0044	1	09/04/12	09/08/12	KWG1210141	
Indeno(1,2,3-cd)pyrene	ND	U	0.021	0.0051	0.0027	1	09/04/12	09/08/12	KWG1210141	
Dibenz(a,h)anthracene	ND	U	0.021	0.0051	0.0026	1	09/04/12	09/08/12	KWG1210141	
Benzo(g,h,i)perylene	ND	U	0.021	0.0051	0.0030	1	09/04/12	09/08/12	KWG1210141	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	78	28-98	09/08/12	Acceptable
Fluoranthene-d10	82	31-105	09/08/12	Acceptable
Terphenyl-d14	90	27-112	09/08/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Polynuclear Aromatic Hydrocarbons

Sample Name:	NSWSD-17-2012	**Units:**	ug/L
Lab Code:	K1208653-006	**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	**0.027**		0.020	0.0050	0.0030	1	09/04/12	09/08/12	KWG1210141	
2-Methylnaphthalene	**0.0073**	J	0.020	0.0050	0.0023	1	09/04/12	09/08/12	KWG1210141	
Acenaphthylene	ND	U	0.020	0.0050	0.0034	1	09/04/12	09/08/12	KWG1210141	
Acenaphthene	**0.014**	J	0.020	0.0050	0.0044	1	09/04/12	09/08/12	KWG1210141	
Fluorene	**0.0094**	J	0.020	0.0050	0.0038	1	09/04/12	09/08/12	KWG1210141	
Phenanthrene	**0.0084**	J	0.020	0.0050	0.0080	1	09/04/12	09/08/12	KWG1210141	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/04/12	09/08/12	KWG1210141	
Fluoranthene	**0.011**	J	0.020	0.0050	0.0044	1	09/04/12	09/08/12	KWG1210141	
Pyrene	ND	Ui	0.020	0.0080	0.0080	1	09/04/12	09/08/12	KWG1210141	
Benz(a)anthracene	**0.0036**	J	0.020	0.0050	0.0026	1	09/04/12	09/08/12	KWG1210141	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/04/12	09/08/12	KWG1210141	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/04/12	09/08/12	KWG1210141	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/04/12	09/08/12	KWG1210141	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/04/12	09/08/12	KWG1210141	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/04/12	09/08/12	KWG1210141	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/04/12	09/08/12	KWG1210141	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/04/12	09/08/12	KWG1210141	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	28-98	09/08/12	Acceptable
Fluoranthene-d10	83	31-105	09/08/12	Acceptable
Terphenyl-d14	92	27-112	09/08/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Sediment

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: NSWSD-5S-2012
Lab Code: K1208653-007

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	**2.2**	J	3.5	1.0	0.60	1	09/04/12	09/06/12	KWG1210109	
2-Methylnaphthalene	**0.68**	J	3.5	1.0	0.58	1	09/04/12	09/06/12	KWG1210109	
Acenaphthylene	**7.3**		3.5	1.0	0.56	1	09/04/12	09/06/12	KWG1210109	
Acenaphthene	**5.0**	X	3.5	1.0	0.50	1	09/04/12	09/06/12	KWG1210109	
Fluorene	**3.4**	JX	3.5	1.0	0.61	1	09/04/12	09/06/12	KWG1210109	
Phenanthrene	ND	U	3.5	1.0	1.4	1	09/04/12	09/06/12	KWG1210109	
Anthracene	ND	Ui	18	18	18	1	09/04/12	09/06/12	KWG1210109	
Fluoranthene	**16**		3.5	1.0	0.98	1	09/04/12	09/06/12	KWG1210109	
Pyrene	**25**		3.5	1.0	0.76	1	09/04/12	09/06/12	KWG1210109	
Benz(a)anthracene	**3.4**	J	3.5	1.0	0.72	1	09/04/12	09/06/12	KWG1210109	
Chrysene	**2.8**	J	3.5	1.0	0.80	1	09/04/12	09/06/12	KWG1210109	
Benzo(b)fluoranthene	**6.7**		3.5	1.0	0.92	1	09/04/12	09/06/12	KWG1210109	
Benzo(k)fluoranthene	**2.7**	J	3.5	1.0	0.87	1	09/04/12	09/06/12	KWG1210109	
Benzo(a)pyrene	**3.1**	J	3.5	1.0	0.99	1	09/04/12	09/06/12	KWG1210109	
Indeno(1,2,3-cd)pyrene	**3.0**	J	3.5	1.0	0.87	1	09/04/12	09/06/12	KWG1210109	
Dibenz(a,h)anthracene	ND	U	3.5	1.0	0.80	1	09/04/12	09/06/12	KWG1210109	
Benzo(g,h,i)perylene	**3.9**		3.5	1.0	0.85	1	09/04/12	09/06/12	KWG1210109	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	67	17-104	09/06/12	Acceptable
Fluoranthene-d10	90	27-106	09/06/12	Acceptable
Terphenyl-d14	106	35-109	09/06/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Sediment

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: NSWSD-4S-2012
Lab Code: K1208653-008

Extraction Method: EPA 3541
Analysis Method: 8270D SIM

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.3	1.0	0.60	1	09/04/12	09/06/12	KWG1210109	
2-Methylnaphthalene	ND	U	3.3	1.0	0.58	1	09/04/12	09/06/12	KWG1210109	
Acenaphthylene	**0.74**	J	3.3	1.0	0.56	1	09/04/12	09/06/12	KWG1210109	
Acenaphthene	**0.86**	J	3.3	1.0	0.50	1	09/04/12	09/06/12	KWG1210109	
Fluorene	**1.0**	J	3.3	1.0	0.61	1	09/04/12	09/06/12	KWG1210109	
Phenanthrene	**5.0**		3.3	1.0	1.4	1	09/04/12	09/06/12	KWG1210109	
Anthracene	**0.84**	J	3.3	1.0	0.55	1	09/04/12	09/06/12	KWG1210109	
Fluoranthene	**9.6**		3.3	1.0	0.98	1	09/04/12	09/06/12	KWG1210109	
Pyrene	**12**		3.3	1.0	0.76	1	09/04/12	09/06/12	KWG1210109	
Benz(a)anthracene	**2.6**	J	3.3	1.0	0.72	1	09/04/12	09/06/12	KWG1210109	
Chrysene	**1.8**	J	3.3	1.0	0.80	1	09/04/12	09/06/12	KWG1210109	
Benzo(b)fluoranthene	**6.0**		3.3	1.0	0.92	1	09/04/12	09/06/12	KWG1210109	
Benzo(k)fluoranthene	**2.3**	J	3.3	1.0	0.87	1	09/04/12	09/06/12	KWG1210109	
Benzo(a)pyrene	**3.4**		3.3	1.0	0.99	1	09/04/12	09/06/12	KWG1210109	
Indeno(1,2,3-cd)pyrene	**3.3**		3.3	1.0	0.87	1	09/04/12	09/06/12	KWG1210109	
Dibenz(a,h)anthracene	ND	U	3.3	1.0	0.80	1	09/04/12	09/06/12	KWG1210109	
Benzo(g,h,i)perylene	**5.0**		3.3	1.0	0.85	1	09/04/12	09/06/12	KWG1210109	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	66	17-104	09/06/12	Acceptable
Fluoranthene-d10	87	27-106	09/06/12	Acceptable
Terphenyl-d14	98	35-109	09/06/12	Acceptable

11/18/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Sediment

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: NSWSD-14S-2012
Lab Code: K1208653-009

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	ND	U	3.3	1.0	0.60	1	09/04/12	09/06/12	KWG1210109	
2-Methylnaphthalene	ND	U	3.3	1.0	0.58	1	09/04/12	09/06/12	KWG1210109	
Acenaphthylene	ND	U	3.3	1.0	0.56	1	09/04/12	09/06/12	KWG1210109	
Acenaphthene	**0.53**	J	3.3	1.0	0.50	1	09/04/12	09/06/12	KWG1210109	
Fluorene	ND	U	3.3	1.0	0.61	1	09/04/12	09/06/12	KWG1210109	
Phenanthrene	ND	U	3.3	1.0	1.4	1	09/04/12	09/06/12	KWG1210109	
Anthracene	ND	U	3.3	1.0	0.55	1	09/04/12	09/06/12	KWG1210109	
Fluoranthene	**2.1**	J	3.3	1.0	0.98	1	09/04/12	09/06/12	KWG1210109	
Pyrene	**3.3**	J	3.3	1.0	0.76	1	09/04/12	09/06/12	KWG1210109	
Benz(a)anthracene	ND	U	3.3	1.0	0.72	1	09/04/12	09/06/12	KWG1210109	
Chrysene	ND	U	3.3	1.0	0.80	1	09/04/12	09/06/12	KWG1210109	
Benzo(b)fluoranthene	**2.0**	J	3.3	1.0	0.92	1	09/04/12	09/06/12	KWG1210109	
Benzo(k)fluoranthene	ND	U	3.3	1.0	0.87	1	09/04/12	09/06/12	KWG1210109	
Benzo(a)pyrene	ND	U	3.3	1.0	0.99	1	09/04/12	09/06/12	KWG1210109	
Indeno(1,2,3-cd)pyrene	**1.4**	J	3.3	1.0	0.87	1	09/04/12	09/06/12	KWG1210109	
Dibenz(a,h)anthracene	ND	U	3.3	1.0	0.80	1	09/04/12	09/06/12	KWG1210109	
Benzo(g,h,i)perylene	**2.0**	J	3.3	1.0	0.85	1	09/04/12	09/06/12	KWG1210109	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	41	17-104	09/06/12	Acceptable
Fluoranthene-d10	51	27-106	09/06/12	Acceptable
Terphenyl-d14	61	35-109	09/06/12	Acceptable

11/8/12

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Sediment	**Date Received:**	08/31/2012

Polynuclear Aromatic Hydrocarbons

Sample Name:	NSWSD-2S-2012	**Units:**	ug/Kg
Lab Code:	K1208653-010	**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	3.4	1.0	0.60	1	09/04/12	09/06/12	KWG1210109	
2-Methylnaphthalene	**0.89**	J	3.4	1.0	0.58	1	09/04/12	09/06/12	KWG1210109	
Acenaphthylene	ND	U	3.4	1.0	0.56	1	09/04/12	09/06/12	KWG1210109	
Acenaphthene	ND	U	3.4	1.0	0.50	1	09/04/12	09/06/12	KWG1210109	
Fluorene	ND	U	3.4	1.0	0.61	1	09/04/12	09/06/12	KWG1210109	
Phenanthrene	ND	Ui	7.1	7.1	7.1	1	09/04/12	09/06/12	KWG1210109	
Anthracene	ND	U	3.4	1.0	0.55	1	09/04/12	09/06/12	KWG1210109	
Fluoranthene	**1.8**	J	3.4	1.0	0.98	1	09/04/12	09/06/12	KWG1210109	
Pyrene	**5.3**		3.4	1.0	0.76	1	09/04/12	09/06/12	KWG1210109	
Benz(a)anthracene	**0.77**	J	3.4	1.0	0.72	1	09/04/12	09/06/12	KWG1210109	
Chrysene	**1.9**	J	3.4	1.0	0.80	1	09/04/12	09/06/12	KWG1210109	
Benzo(b)fluoranthene	**1.7**	J	3.4	1.0	0.92	1	09/04/12	09/06/12	KWG1210109	
Benzo(k)fluoranthene	ND	U	3.4	1.0	0.87	1	09/04/12	09/06/12	KWG1210109	
Benzo(a)pyrene	ND	U	3.4	1.0	0.99	1	09/04/12	09/06/12	KWG1210109	
Indeno(1,2,3-cd)pyrene	**1.4**	J	3.4	1.0	0.87	1	09/04/12	09/06/12	KWG1210109	
Dibenz(a,h)anthracene	ND	U	3.4	1.0	0.80	1	09/04/12	09/06/12	KWG1210109	
Benzo(g,h,i)perylene	**2.1**	J	3.4	1.0	0.85	1	09/04/12	09/06/12	KWG1210109	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	60	17-104	09/06/12	Acceptable
Fluoranthene-d10	71	27-106	09/06/12	Acceptable
Terphenyl-d14	85	35-109	09/06/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: NSWSD-8-2012
Lab Code: K1208653-012

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	0.0050	J	0.020	0.0050	0.0030	1	09/04/12	09/08/12	KWG1210141	
2-Methylnaphthalene	ND	U	0.020	0.0050	0.0023	1	09/04/12	09/08/12	KWG1210141	
Acenaphthylene	ND	U	0.020	0.0050	0.0034	1	09/04/12	09/08/12	KWG1210141	
Acenaphthene	ND	U	0.020	0.0050	0.0044	1	09/04/12	09/08/12	KWG1210141	
Fluorene	0.0039	J	0.020	0.0050	0.0038	1	09/04/12	09/08/12	KWG1210141	
Phenanthrene	0.013	J	0.020	0.0050	0.0080	1	09/04/12	09/08/12	KWG1210141	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/04/12	09/08/12	KWG1210141	
Fluoranthene	0.015	J	0.020	0.0050	0.0044	1	09/04/12	09/08/12	KWG1210141	
Pyrene	ND	Ui	0.020	0.013	0.013	1	09/04/12	09/08/12	KWG1210141	
Benz(a)anthracene	0.0047	J	0.020	0.0050	0.0026	1	09/04/12	09/08/12	KWG1210141	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/04/12	09/08/12	KWG1210141	
Benzo(b)fluoranthene	0.0036	J	0.020	0.0050	0.0023	1	09/04/12	09/08/12	KWG1210141	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/04/12	09/08/12	KWG1210141	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/04/12	09/08/12	KWG1210141	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/04/12	09/08/12	KWG1210141	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/04/12	09/08/12	KWG1210141	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/04/12	09/08/12	KWG1210141	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	28-98	09/08/12	Acceptable
Fluoranthene-d10	83	31-105	09/08/12	Acceptable
Terphenyl-d14	89	27-112	09/08/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Sediment

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: 852S-2012
Lab Code: K1208653-013

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	**54**	D	28	5.6	3.4	5	09/04/12	09/07/12	KWG1210109	
2-Methylnaphthalene	**13**	JD	28	5.6	3.3	5	09/04/12	09/07/12	KWG1210109	
Acenaphthylene	**69**	D	28	5.6	3.2	5	09/04/12	09/07/12	KWG1210109	
Acenaphthene	**110**	D	28	5.6	2.8	5	09/04/12	09/07/12	KWG1210109	
Fluorene	**390**	D	28	5.6	3.5	5	09/04/12	09/07/12	KWG1210109	
Phenanthrene	ND	Ui	470	470	470	5	09/04/12	09/07/12	KWG1210109	
Anthracene	ND	Ui	420	420	420	5	09/04/12	09/07/12	KWG1210109	
Fluoranthene	**220**	D	28	5.6	5.5	5	09/04/12	09/07/12	KWG1210109	
Pyrene	**420**	D	28	5.6	4.3	5	09/04/12	09/07/12	KWG1210109	
Benz(a)anthracene	**33**	D	28	5.6	4.1	5	09/04/12	09/07/12	KWG1210109	
Chrysene	**52**	D	28	5.6	4.5	5	09/04/12	09/07/12	KWG1210109	
Benzo(b)fluoranthene	**90**	D	28	5.6	5.2	5	09/04/12	09/07/12	KWG1210109	
Benzo(k)fluoranthene	**28**	JD	28	5.6	4.9	5	09/04/12	09/07/12	KWG1210109	
Benzo(a)pyrene	**16**	JD	28	5.6	5.6	5	09/04/12	09/07/12	KWG1210109	
Indeno(1,2,3-cd)pyrene	**51**	D	28	5.6	4.9	5	09/04/12	09/07/12	KWG1210109	
Dibenz(a,h)anthracene	**20**	JD	28	5.6	4.5	5	09/04/12	09/07/12	KWG1210109	
Benzo(g,h,i)perylene	**48**	D	28	5.6	4.8	5	09/04/12	09/07/12	KWG1210109	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	83	17-104	09/07/12	Acceptable
Fluoranthene-d10	69	27-106	09/07/12	Acceptable
Terphenyl-d14	101	35-109	09/07/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Polynuclear Aromatic Hydrocarbons

Sample Name: 852-2012
Lab Code: K1208653-014

Extraction Method: EPA 3520C
Analysis Method: 8270D SIM

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.012**	J	0.020	0.0050	0.0030	1	09/04/12	09/08/12	KWG1210141	
2-Methylnaphthalene	**0.0063**	J	0.020	0.0050	0.0023	1	09/04/12	09/08/12	KWG1210141	
Acenaphthylene	ND	U	0.020	0.0050	0.0034	1	09/04/12	09/08/12	KWG1210141	
Acenaphthene	**0.0080**	J	0.020	0.0050	0.0044	1	09/04/12	09/08/12	KWG1210141	
Fluorene	**0.015**	J	0.020	0.0050	0.0038	1	09/04/12	09/08/12	KWG1210141	
Phenanthrene	**0.0090**	J	0.020	0.0050	0.0080	1	09/04/12	09/08/12	KWG1210141	
Anthracene	ND	U	0.020	0.0050	0.0036	1	09/04/12	09/08/12	KWG1210141	
Fluoranthene	**0.012**	J	0.020	0.0050	0.0044	1	09/04/12	09/08/12	KWG1210141	
Pyrene	**0.0088**	J	0.020	0.0050	0.0035	1	09/04/12	09/08/12	KWG1210141	
Benz(a)anthracene	**0.0036**	J	0.020	0.0050	0.0026	1	09/04/12	09/08/12	KWG1210141	
Chrysene	ND	U	0.020	0.0050	0.0034	1	09/04/12	09/08/12	KWG1210141	
Benzo(b)fluoranthene	ND	U	0.020	0.0050	0.0023	1	09/04/12	09/08/12	KWG1210141	
Benzo(k)fluoranthene	ND	U	0.020	0.0050	0.0025	1	09/04/12	09/08/12	KWG1210141	
Benzo(a)pyrene	ND	U	0.020	0.0050	0.0043	1	09/04/12	09/08/12	KWG1210141	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0050	0.0026	1	09/04/12	09/08/12	KWG1210141	
Dibenz(a,h)anthracene	ND	U	0.020	0.0050	0.0025	1	09/04/12	09/08/12	KWG1210141	
Benzo(g,h,i)perylene	ND	U	0.020	0.0050	0.0029	1	09/04/12	09/08/12	KWG1210141	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	28-98	09/08/12	Acceptable
Fluoranthene-d10	83	31-105	09/08/12	Acceptable
Terphenyl-d14	91	27-112	09/08/12	Acceptable

11/8/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 29 through August 30, 2012

LDC Report Date: November 8, 2012

Matrix: Water

Parameters: Gasoline Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208653

Sample Identification

TB082912A
02-817-2012
02-461-2012
02-453-2012
NMCB-04-2012
02-452-2012
02-462-2012
NMCB-08-2012
E-201-2012

Introduction

This data review covers 9 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 of compounds 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

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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
KWG1210546-5	9/11/12	Gasoline range organics (C6-C10)	14 ug/L	All samples in SDG K1208653

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	Reported Concentration	Modified Final Concentration
TB082912A	Gasoline range organics (C6-C10)	17 ug/L	100U ug/L

Sample TB082912A was identified as a trip blank. No gasoline range organic contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
TB082912A	8/29/12	Gasoline range organics (C6-C10)	17 ug/L	02-817-2012 02-461-2012 02-453-2012 NMCB-04-2012 02-452-2012 02-462-2012 NMCB-08-2012 E-201-2012

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

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

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 02-452-2012 and 02-462-2012 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)
	02-452-2012	02-462-2012	
Gasoline range organics (C6-C10)	4200	4300	2 (≤50)

Adak LTM 2012
Gasoline Range Organics - Data Qualification Summary - SDG K1208653

No Sample Data Qualified in this SDG

Adak LTM 2012
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208653

SDG	Sample	Compound	Modified Final Concentration	A or P
K1208653	TB082912A	Gasoline range organics (C6-C10)	100U ug/L	A

Adak LTM 2010
Gasoline Range Organics - Field Blank Data Qualification Summary - SDG K1208653

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Gasoline Range Organics

Sample Name:	TB082912A	**Units:**	ug/L
Lab Code:	K1208653-015	**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	17	J	100 U	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	85	50-150	09/11/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/29/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: 02-817-2012
Lab Code: K1208653-016

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**5700**	Y	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	81	50-150	09/11/12	Acceptable

9/11/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Gasoline Range Organics

Sample Name:	02-461-2012	**Units:**	ug/L
Lab Code:	K1208653-017	**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	**7800**	Y	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	86	50-150	09/11/12	Acceptable

9/11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Gasoline Range Organics

Sample Name:	02-453-2012	**Units:**	ug/L
Lab Code:	K1208653-018	**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	**2600**	Y	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	74	50-150	09/11/12	Acceptable

9/18/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Gasoline Range Organics

Sample Name:	NMCB-04-2012	**Units:**	ug/L
Lab Code:	K1208653-019	**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	**3300**	Y	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	73	50-150	09/11/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/29/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: 02-452-2012
Lab Code: K1208653-020

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**4200**	Y	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	75	50-150	09/11/12	Acceptable

9/11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/29/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: 02-462-2012
Lab Code: K1208653-021

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**4300**	Y	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	76	50-150	09/11/12	Acceptable

9/11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/30/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: NMCB-08-2012
Lab Code: K1208653-022

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**2200**	Y	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	80	50-150	09/11/12	Acceptable

9/18/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/30/2012
Date Received: 08/31/2012

Gasoline Range Organics

Sample Name: E-201-2012
Lab Code: K1208653-024

Extraction Method: EPA 5030B
Analysis Method: AK101

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C6 - C10 GRO	**9900**	Y	100	25	13	1	09/11/12	09/11/12	KWG1210546	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	82	50-150	09/11/12	Acceptable

9/11/8/12

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Adak LTM 2012

Collection Date: August 27 through August 30, 2012

LDC Report Date: November 5, 2012

Matrix: Sediment/Water

Parameters: Diesel Range Organics

Validation Level: EPA Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1208653

Sample Identification

02-230-2012
MRP-MW8-2012
601-2012
NSWSD-7-2012
NSWSD-17-2012
NSWSD-5S-2012
NSWSD-4S-2012
NSWSD-2S-2012
NSWSD-12S-2012
NSWSD-8-2012
852S-2012
852-2012
02-817-2012
02-461-2012
02-453-2012
NMCB-04-2012
02-452-2012
NMCB-08-2012
NMCB-18-2012
E-201-2012

Introduction

This data review covers 5 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.

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 for compounds were less than or equal to 25.0%.

III. Continuing Calibration

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 25.0% QC limits.

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
KWG1210106-3	9/4/12	Diesel range organics (C10-C25)	11 ug/L	All water samples in SDG K1208653

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	Reported Concentration	Modified Final Concentration
NSWSD-7-2012	Diesel range organics (C10-C25)	38 ug/L	49U ug/L
NSWSD-17-2012	Diesel range organics (C10-C25)	35 ug/L	49U ug/L
NSWSD-8-2012	Diesel range organics (C10-C25)	34 ug/L	50U ug/L

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 was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate.

VII. Laboratory Control Samples

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 and LOQs/LODs

All compound quantitation and LOQs/LODs 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 NSWSD-7-2012 and NSWSD-17-2012, samples NSWSD-2S-2012 and NSWSD-12S-2012, and samples NMCB-08-2012 and NMCB-18-2012 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)
	NSWSD-7-2012	NSWSD-17-2012	
Diesel range organics (C10-C25)	38	35	8 (≤50)

Compound	Concentration (mg/Kg)		RPD (Limits)
	NSWSD-2S-2012	NSWSD-12S-2012	
Diesel range organics (C10-C25)	1400	1100	24 (≤50)

Compound	Concentration (ug/L)		RPD (Limits)
	NMCB-08-2012	NMCB-18-2012	
Diesel range organics (C10-C25)	4100	3800	8 (≤50)

Adak LTM 2012
Diesel Range Organics - Data Qualification Summary - SDG K1208653

No Sample Data Qualified in this SDG

Adak LTM 2012
Diesel Range Organics - Laboratory Blank Data Qualification Summary - SDG K1208653

SDG	Sample	Compound	Modified Final Concentration	A or P
K1208653	NSWSD-7-2012	Diesel range organics (C10-C25)	49U ug/L	A
K1208653	NSWSD-17-2012	Diesel range organics (C10-C25)	49U ug/L	A
K1208653	NSWSD-8-2012	Diesel range organics (C10-C25)	50U ug/L	A

Adak LTM 2012
Diesel Range Organics - Field Blank Data Qualification Summary - SDG K1208653

No Sample Data Qualified in this SDG

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/27/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	02-230-2012	**Units:**	ug/L
Lab Code:	K1208653-001	**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	**3200**	Y	49	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	85	50-150	09/18/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/27/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	MRP-MW8-2012	**Units:**	ug/L
Lab Code:	K1208653-002	**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	**3900**	Y	49	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	09/18/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/27/2012
Date Received: 08/31/2012

Diesel Range Organics

Sample Name: 601-2012
Lab Code: K1208653-003

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	**1800**	Y	48	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	98	50-150	09/18/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Diesel Range Organics

Sample Name: NSWSD-7-2012
Lab Code: K1208653-005

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	38	J	49	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	09/18/12	Acceptable

11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Water

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Diesel Range Organics

Sample Name: NSWSD-17-2012
Lab Code: K1208653-006

Extraction Method: EPA 3510C
Analysis Method: AK102

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	35	J 49U	49	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	82	50-150	09/18/12	Acceptable

9/11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Sediment	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	NSWSD-5S-2012	**Units:**	mg/Kg
Lab Code:	K1208653-007	**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	**430**	Y	9.2	4.5	1.8	1	09/10/12	09/12/12	KWG1210331	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	95	50-150	09/12/12	Acceptable

9/11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Sediment	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	NSWSD-4S-2012	**Units:**	mg/Kg
Lab Code:	K1208653-008	**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	**100**	Y	8.8	4.4	1.7	1	09/10/12	09/12/12	KWG1210331	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	95	50-150	09/12/12	Acceptable

9/18/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Sediment	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	NSWSD-2S-2012	**Units:**	mg/Kg
Lab Code:	K1208653-010	**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	**1400**	Y	9.0	4.5	1.8	1	09/10/12	09/12/12	KWG1210331	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	109	50-150	09/12/12	Acceptable

9/11/8/12

Comments:

Client: Sealaska Environmental Services, LLC
Project: TO 55 Adak LTM 2012/14005.055.301
Sample Matrix: Sediment

Service Request: K1208653
Date Collected: 08/28/2012
Date Received: 08/31/2012

Diesel Range Organics

Sample Name: NSWSD-12S-2012
Lab Code: K1208653-011

Extraction Method: EPA 3550B
Analysis Method: AK102

Units: mg/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C10 - C25 DRO	**1100**	Y	8.4	4.2	1.7	1	09/10/12	09/12/12	KWG1210331	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	101	50-150	09/12/12	Acceptable

9/11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	NSWSD-8-2012	**Units:**	ug/L
Lab Code:	K1208653-012	**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	**34**	J	50	50	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	85	50-150	09/18/12	Acceptable

9/18/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Sediment	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	852S-2012	**Units:**	mg/Kg
Lab Code:	K1208653-013	**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	**10000**	DY	150	74	30	10	09/10/12	09/12/12	KWG1210331	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	121	50-150	09/12/12	Acceptable

9/18/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/28/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	852-2012	**Units:**	ug/L
Lab Code:	K1208653-014	**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	**130**		50	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	77	50-150	09/18/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	02-817-2012	**Units:**	ug/L
Lab Code:	K1208653-016	**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	50	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	89	50-150	09/18/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	02-461-2012	**Units:**	ug/L
Lab Code:	K1208653-017	**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	**4900**	Y	50	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	71	50-150	09/18/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	02-453-2012	**Units:**	ug/L
Lab Code:	K1208653-018	**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	**5600**	Y	50	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	76	50-150	09/18/12	Acceptable

9/18/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	NMCB-04-2012	**Units:**	ug/L
Lab Code:	K1208653-019	**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	50	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	85	50-150	09/18/12	Acceptable

9/11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/29/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	02-452-2012	**Units:**	ug/L
Lab Code:	K1208653-020	**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	49	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	79	50-150	09/18/12	Acceptable

9/11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/30/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	NMCB-08-2012	**Units:**	ug/L
Lab Code:	K1208653-022	**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	**4100**	Y	50	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	89	50-150	09/18/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/30/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	NMCB-18-2012	**Units:**	ug/L
Lab Code:	K1208653-023	**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	**3800**	Y	49	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	09/18/12	Acceptable

11/8/12

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1208653
Project:	TO 55 Adak LTM 2012/14005.055.301	**Date Collected:**	08/30/2012
Sample Matrix:	Water	**Date Received:**	08/31/2012

Diesel Range Organics

Sample Name:	E-201-2012	**Units:**	ug/L
Lab Code:	K1208653-024	**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	**1500**	L	49	20	11	1	09/04/12	09/18/12	KWG1210106	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	91	50-150	09/18/12	Acceptable

9/18/12

Comments:

APPENDIX G

DATA QUALITY ASSESSMENT SUMMARIES

Table G-1. Relative Percent Differences between Parent Sample/Field Duplicate Pairs for the 2012 Groundwater Monitoring (Water Samples)

Parent Sample/ Field Duplicate Location	Analyte	Parent Sample Concentration (µg/L)	Field Duplicate Concentration (µg/L)	RPD (%)
02-231	Benzene	25 J	26	3.9
02-231	Toluene	3.9 J	3.8	2.6
02-231	Ethylbenzene	70 D	74 D	5.6
02-231	m,p-Xylenes	260 D	280 D	7.4
02-231	o-Xylene	8.9 J	9.1	2.2
02-231	DRO	5,400 YJ	5,700 YJ	5.4
02-452	GRO	4,200 Y	4,300 Y	2.4
04-100	GRO	3,800 Y	3,600 Y	5.4
04-290	DRO	5,600 Y	5,600 Y	0
04-306	GRO	670 Y	620 Y	7.8
05-735	1,1-Dichloroethene	0.75	0.78	3.9
05-735	cis-1,2-Dichloroethene	240 D	280 D	15.4
05-735	trans-1,2-Dichloroethene	13	14	7.4
05-735	Tetrachloroethene	0.90	0.78	14.3
05-735	Trichloroethene	1.6	1.4	13.3
05-735	Vinyl chloride	2.7	3.1	13.8
MW-14-5	Lead, dissolved	17.0	17.4	2.3
MW-14-5	Lead, total	17.2	17.3	0.6
NMCB-08	Benzene	29 J	29 J	0
NMCB-08	DRO	4,100 Y	3,800 Y	7.6
NSWSD-7	Benzene	0.37 J	0.080 J	**129**
NSWSD-7	Toluene	0.50 U	0.50 U	NC
NSWSD-7	Ethylbenzene	0.060 J	0.50 U	NC
NSWSD-7	m,p-Xylenes	0.50 U	0.50 U	NC
NSWSD-7	o-Xylene	0.50 U	0.50 U	NC
NSWSD-7	2-Methylnaphthalene	0.0077 J	0.0073	5.3
NSWSD-7	Acenaphthene	0.015 J	0.014 J	6.9
NSWSD-7	Acenaphthylene	0.021 U	0.020 U	NC
NSWSD-7	Anthracene	0.021 U	0.020 U	NC
NSWSD-7	Benzo(a)anthracene	0.0035 J	0.0036 J	2.8
NSWSD-7	Benzo(a)pyrene	0.021 U	0.020 U	NC
NSWSD-7	Benzo(b)fluoranthene	0.021 U	0.020 U	NC
NSWSD-7	Benzo(g,h,i)perylene	0.021 U	0.020 U	NC
NSWSD-7	Benzo(k)fluoranthene	0.021 U	0.020 U	NC
NSWSD-7	Chrysene	0.021 U	0.020 U	NC
NSWSD-7	Dibenzo(a,h)anthracene	0.021 U	0.020 U	NC
NSWSD-7	Fluoranthene	0.011 J	0.011 J	0
NSWSD-7	Fluorene	0.010 J	0.0094 J	6.2
NSWSD-7	Indeno(1,2,3-cd)pyrene	0.021 U	0.020 U	NC
NSWSD-7	Naphthalene	0.029	0.027	7.1
NSWSD-7	Phenanthrene	0.0089 J	0.0084 J	5.8
NSWSD-7	Pyrene	0.021 U	0.020 U	NC
NSWSD-7	DRO	49 U	49 U	NC

Table G-1. Relative Percent Differences between Parent Sample/Field Duplicate Pairs for the 2012 Groundwater Monitoring (Water Samples) (continued)

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/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.
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 2012 Groundwater Monitoring (Sediment Samples)

Parent Sample/Field Duplicate Location	Analyte	Parent Sample Concentration (µg/kg)	Field Duplicate Concentration (µg/kg)	RPD (%)
NL-04	Benzene	670 U	640 U	NC
NL-04	Toluene	670 U	640 U	NC
NL-04	Ethylbenzene	670 U	640 U	NC
NL-04	m,p-Xylenes	670 U	640 U	NC
NL-04	o-Xylene	670 U	640 U	NC
NL-04	GRO	67,000 U	63,000 U	NC
NSWSD-2	DRO	1,400,000 Y	1,100,000 Y	24.0
NSWSD-4	2-Methylnaphthalene	3.3 U	3.3 U	NC
NSWSD-4	Acenaphthene	0.86 J	0.53 J	47.5
NSWSD-4	Acenaphthylene	0.74 J	3.3 U	NC
NSWSD-4	Anthracene	0.84 J	3.3 U	NC
NSWSD-4	Benzo(a)anthracene	2.6 J	3.3 U	NC
NSWSD-4	Benzo(a)pyrene	3.4	3.3 U	NC
NSWSD-4	Benzo(b)fluoranthene	6.0	2.0 J	**100**
NSWSD-4	Benzo(g,h,i)perylene	5.0	2.0 J	**85.7**
NSWSD-4	Benzo(k)fluoranthene	2.3 J	3.3 U	NC
NSWSD-4	Chrysene	1.8 J	3.3 U	NC
NSWSD-4	Dibenzo(a,h)anthracene	3.3 U	3.3 U	NC
NSWSD-4	Fluoranthene	9.6	2.1 J	**128**
NSWSD-4	Fluorene	1.0 J	3.3 U	NC
NSWSD-4	Indeno(1,2,3-cd)pyrene	3.3	1.4 J	**80.9**
NSWSD-4	Naphthalene	3.3 U	3.3 U	NC
NSWSD-4	Phenanthrene	5.0	3.3 U	NC
NSWSD-4	Pyrene	12	3.3 J	**114**

Bolded values represent RPD values greater than 50% criterion.

Notes:

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.
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 2012 Groundwater Monitoring

Completeness Parameter	GRO AK101.0	Benzene 8260C	BTEX 8260C	DRO AK102.0	VOCs, PCE and Daughter Products 8260C	PAHs 8270D SIM	Total and Dissolved Lead 6020A
Former Power Plant, Building T-1451							
Environmental samples scheduled			2	5		3	
Environmental samples collected			1	4		2	
Environmental samples rejected			0	0		0	
Environmental samples collected and not rejected			1	4		2	
Percent of Environmental samples complete			50%	80%		67%	
GCI Compound, UST GCI-1							
Environmental samples scheduled	6			5			
Environmental samples collected	6			5			
Environmental samples rejected	0			0			
Environmental samples collected and not rejected	6			5			
Percent of Environmental samples complete	100%			100%			
NMCB Building T-1416 Expanded Area							
Environmental samples scheduled	15	15		15			
Environmental samples collected	12	12		12			
Environmental samples rejected	0	0		0			
Environmental samples collected and not rejected	12	12		12			
Percent of Environmental samples complete	80%	80%		80%			
ROICC Contractor's Area, UST ROICC-7							
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%					
Runway 5-23 Avgas Valve Pit							
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%						

Table G-3. Completeness Percentages for 2012 Groundwater Monitoring (continued)

Completeness Parameter	GRO AK101.0	Benzene 8260C	BTEX 8260C	DRO AK102.0	VOCs, PCE and Daughter Products 8260C	PAHs 8270D SIM	Total and Dissolved Lead 6020A
SA 78, Old Transportation Building, USTs 10583 and 10584 and ASTs							
Environmental samples scheduled	2	2		3			
Environmental samples collected	2	2		3			
Environmental samples rejected	0	0		0			
Environmental samples collected and not rejected	2	2		3			
Percent of Environmental samples complete	100%	100%		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				5			
Environmental samples collected				5			
Environmental samples rejected				0			
Environmental samples collected and not rejected				5			
Percent of Environmental samples complete				100%			
South of Runway 18-36 Area							
Environmental samples scheduled			5	6		8	
Environmental samples collected			5	6		8	
Environmental samples rejected			0	0		0	
Environmental samples collected and not rejected			5	6		8	
Percent of Environmental samples complete			100%	100%		100%	
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%

Table G-3. Completeness Percentages for 2012 Groundwater Monitoring (continued)

Completeness Parameter	GRO AK101.0	Benzene 8260C	BTEX 8260C	DRO AK102.0	VOCs, PCE and Daughter Products 8260C	PAHs 8270D SIM	Total and Dissolved Lead 6020A
SWMU 17, Power Plant 3							
Environmental samples scheduled				3	1		
Environmental samples collected				3	1		
Environmental samples rejected				0	0		
Environmental samples collected and not rejected				3	1		
Percent of Environmental samples complete				100%	100%		
SWMU 58/SA 73, Heating Plant 6							
Environmental samples scheduled				4			
Environmental samples collected				3			
Environmental samples rejected				0			
Environmental samples collected and not rejected				3			
Percent of Environmental samples complete				75%			
SWMU 60, Tank Farm A							
Environmental samples scheduled		1	6	6		7	
Environmental samples collected		1	6	6		7	
Environmental samples rejected		0	0	0		0	
Environmental samples collected and not rejected		1	6	6		7	
Percent of Environmental samples complete		100%	100%	100%		100%	
SWMU 61, Tank Farm B							
Environmental samples scheduled	7		7			3	
Environmental samples collected	7		7			3	
Environmental samples rejected	0		0			0	
Environmental samples collected and not rejected	7		7			3	
Percent of Environmental samples complete	100%		100%			100%	
SWMU 62, New Housing Fuel Leak							
Environmental samples scheduled	8	1	8	24		2	
Environmental samples collected	8	1	8	24		2	
Environmental samples rejected	0	0	0	0		0	
Environmental samples collected and not rejected	8	1	8	24		2	
Percent of Environmental samples complete	100%	100%	100%	100%		100%	

Table G-3. Completeness Percentages for 2012 Groundwater Monitoring (continued)

Completeness Parameter	GRO AK101.0	Benzene 8260C	BTEX 8260C	DRO AK102.0	VOCs, PCE and Daughter Products 8260C	PAHs 8270D SIM	Total and Dissolved Lead 6020A
Tanker Shed UST 42494							
Environmental samples scheduled	3			4			
Environmental samples collected	3			4			
Environmental samples rejected	0			0			
Environmental samples collected and not rejected	3			4			
Percent of Environmental samples complete	100%			100%			
Total – All Sites							
Environmental samples scheduled	44	22	28	84	2	23	1
Environmental samples collected	41	19	27	79	2	22	1
Environmental samples rejected	0	0	0	0	0	0	0
Environmental samples collected and not rejected	41	19	27	79	2	22	1
Percent of Environmental samples complete	93%	86%	96%	94%	100%	96%	100%

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
NMCB = Naval Mobile Construction Battalion
PAHs = polycyclic aromatic hydrocarbons
PCE = perchloroethylene
ROICC = Resident Officer in Charge of Construction
SA = source area
SIM = select ion method
SWMU = solid waste management unit
VOCs = volatile organic compounds
UST = underground storage tank

APPENDIX H

STATISTICAL CALCULATIONS

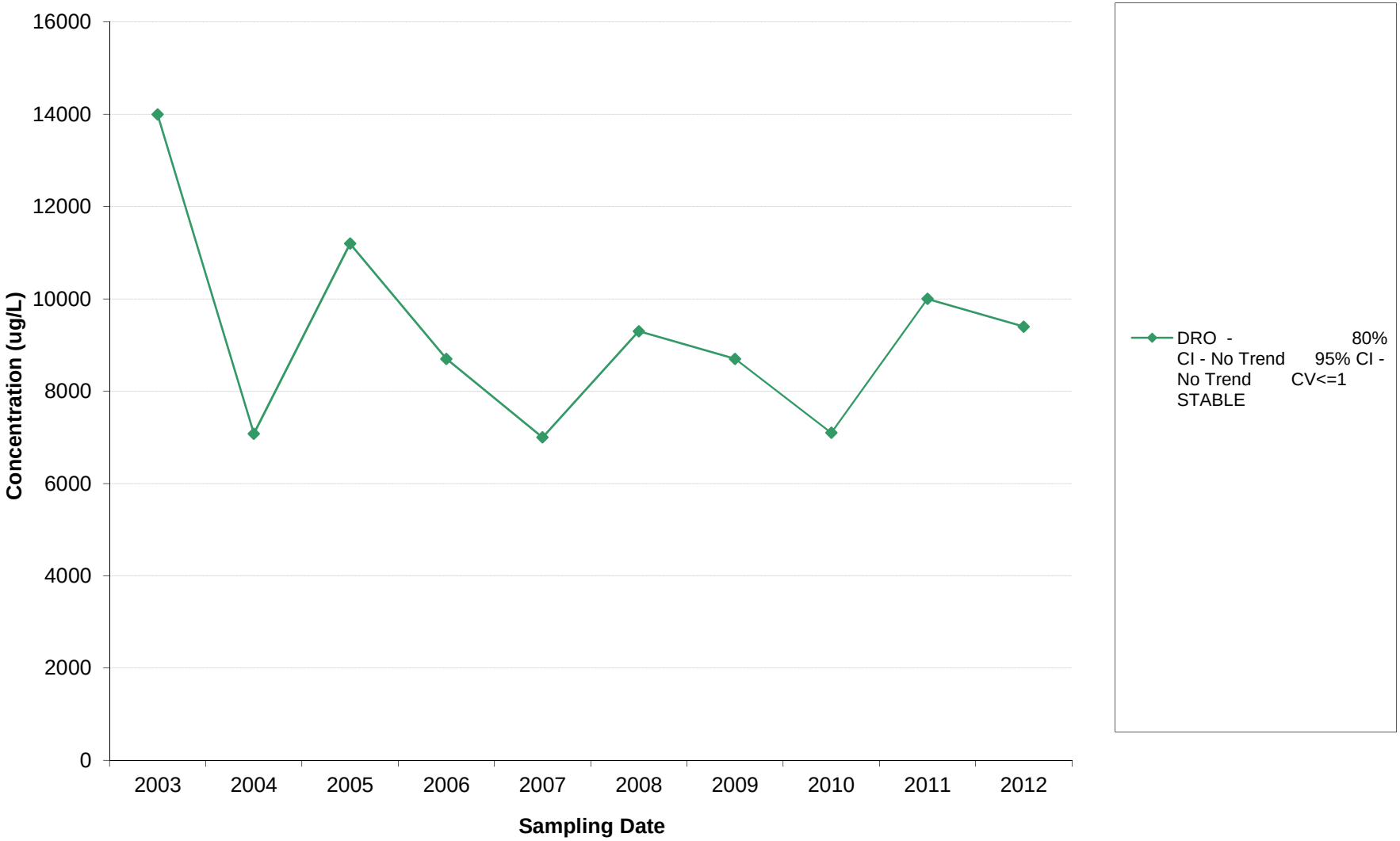
Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55		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	10/01/03	**14000**					
2	10/01/04	**7080**					
3	10/01/05	**11200**					
4	10/01/06	**8700**					
5	10/01/07	**7000**					
6	10/01/08	**9300**					
7	10/01/09	**8700**					
8	10/01/10	**7100**					
9	10/01/11	**10000**					
10	09/01/12	**9400**					
	Mann Kendall Statistic (S) =	-2	0	0	0	0	0
	Number of Rounds (n) =	10	0	0	0	0	0
	Average =	9248.00					
	Standard Deviation =	2158.996					
	Coefficient of Variation(CV)=	0.233					
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 =	RB	Date =	11/30/2012	Checked By =	CA

Former Power Plant, 01-118
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55		Site ID No. = GCI Compound		Well Number =	04-100

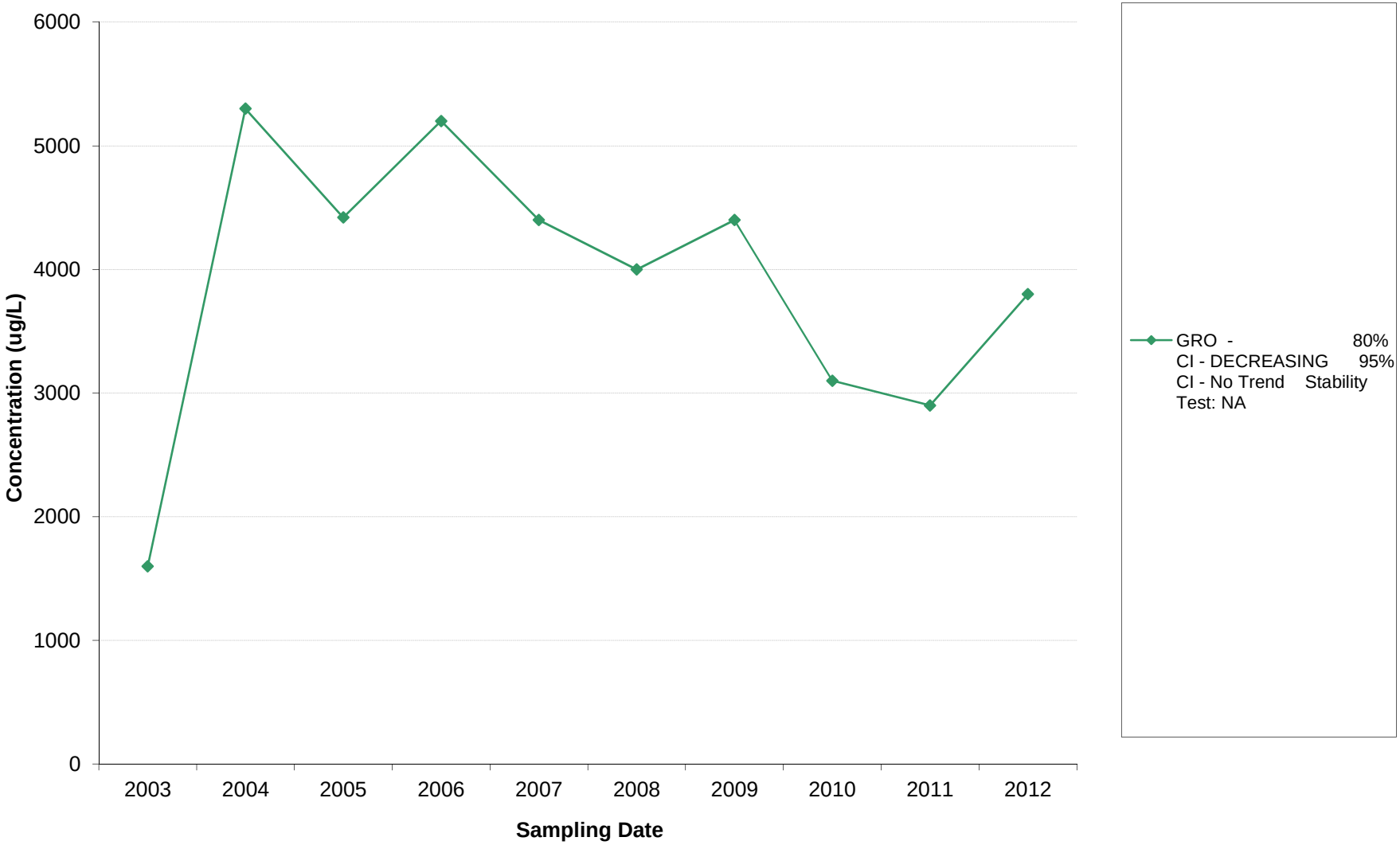
	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/03	**1600**					
2	10/01/04	**5300**					
3	10/01/05	**4420**					
4	10/01/06	**5200**					
5	10/01/07	**4400**					
6	10/01/08	**4000**					
7	10/01/09	**4400**					
8	10/01/10	**3100**					
9	10/01/11	**2900**					
10	09/01/12	**3800**					

Mann Kendall Statistic (S) =	-18	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	3912.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1123.930	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.287	#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 =	RB	Date =	11/30/2012	Checked By =	CA

GCI Compound, 04-100
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55		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	**5100**					
2	10/01/08	**4400**					
3	10/01/09	**5200**					
4	10/01/10	**3300**					
5	09/01/12	**3400**					
6							
7							
8							
9							
10							

Mann Kendall Statistic (S) =	-4	0	0	0	0	0
Number of Rounds (n) =	5	0	0	0	0	0
Average =	4280.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	903.881	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.211	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

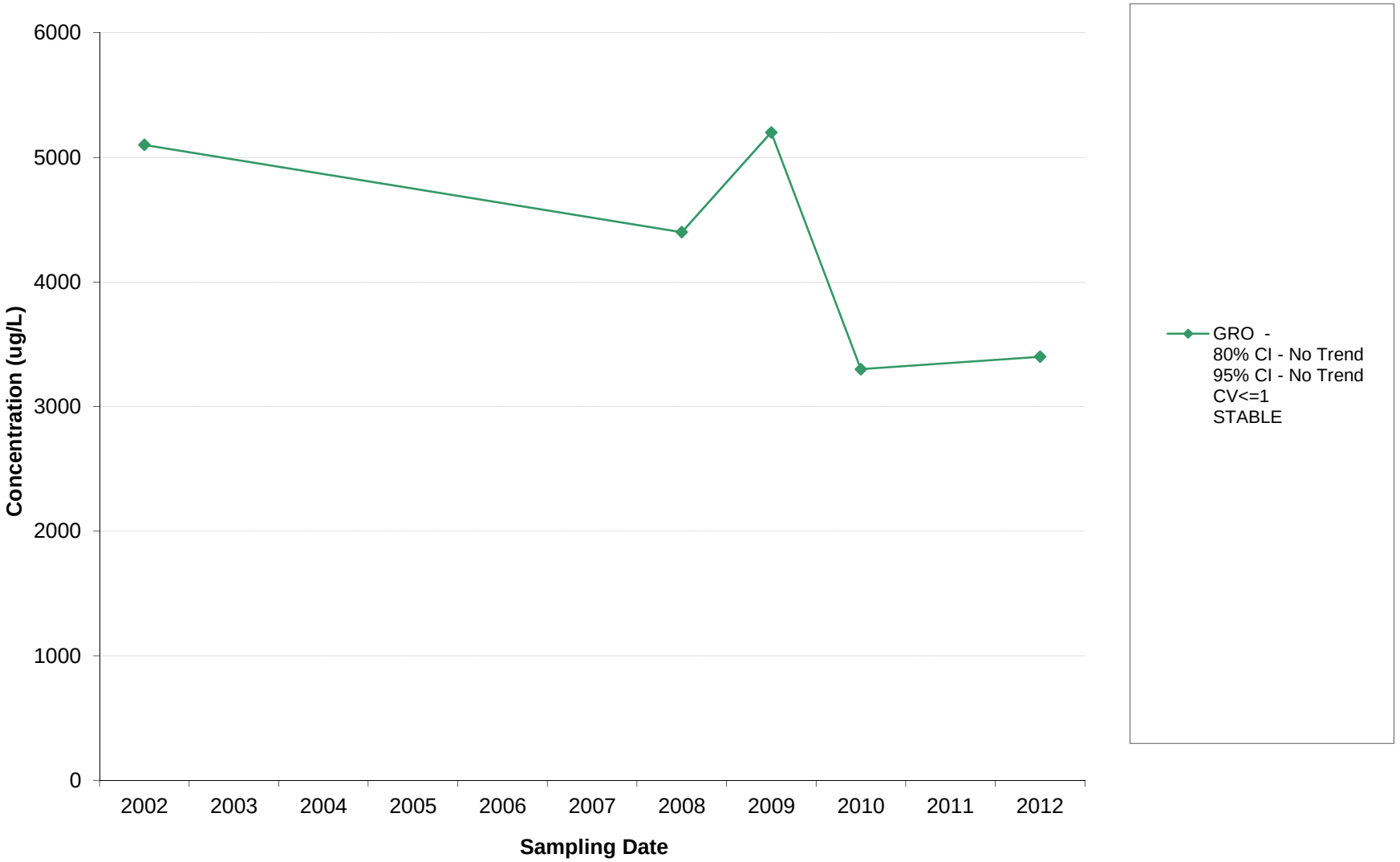
Error Check, Blank if No Errors Detected	N<4	N<4	N<4	N<4	N<4

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 =	RB	Date =	11/30/2012	Checked By =	CA

GCI Compound, 04-202
Contaminant Concentration vs. Time

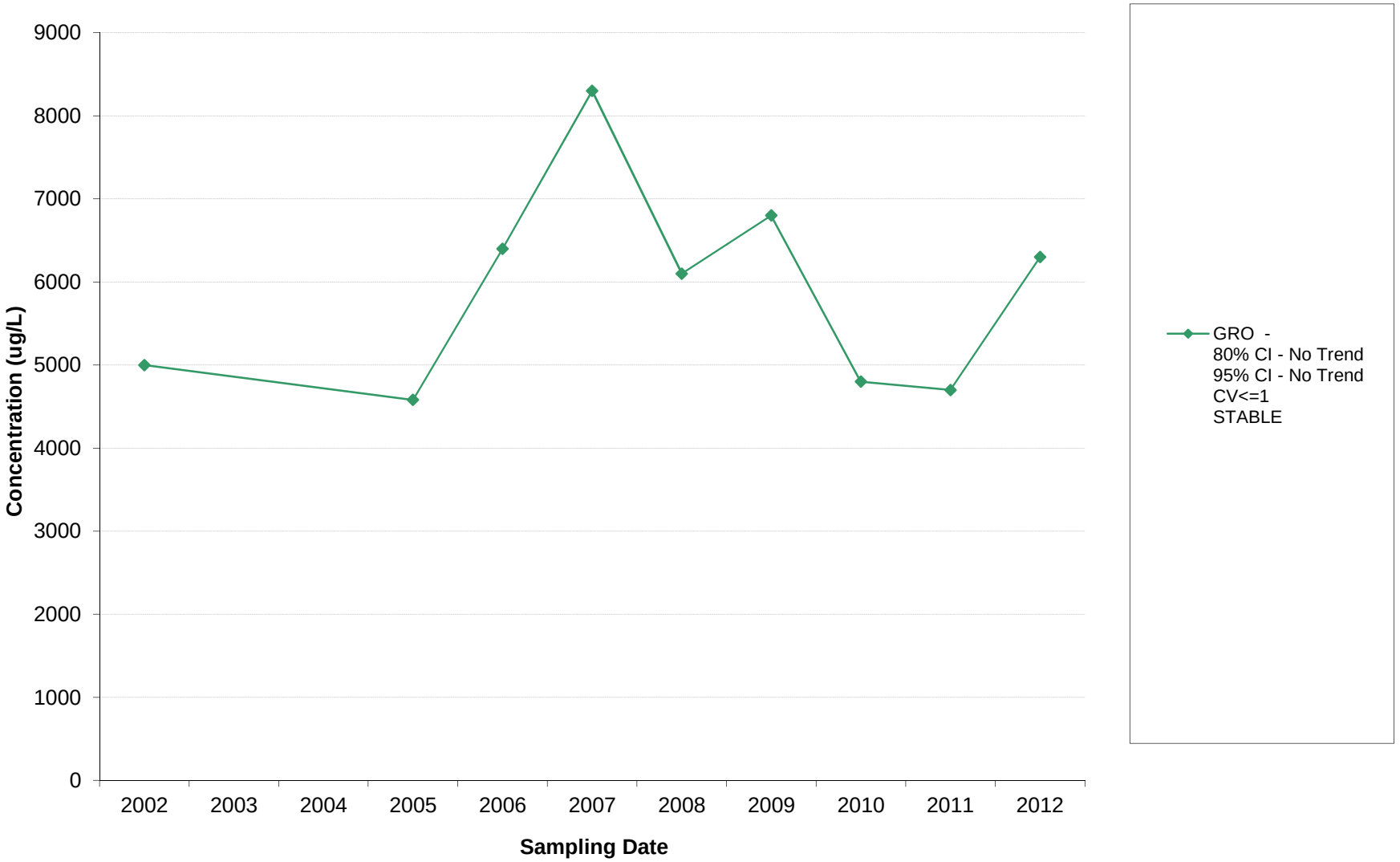


Mann-Kendall Statistical Test

Site Name =	**2012 Adak Long Term Monitoring TO 55**		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	**5000**					
2	10/01/05	**4580**					
3	10/01/06	**6400**					
4	10/01/07	**8300**					
5	10/01/08	**6100**					
6	10/01/09	**6800**					
7	10/01/10	**4800**					
8	10/01/11	**4700**					
9	09/01/12	**6300**					
10							
	Mann Kendall Statistic (S) =	0	0	0	0	0	0
	Number of Rounds (n) =	9	0	0	0	0	0
	Average =	5886.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Standard Deviation =	1235.961	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.210	#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 =	RB	Date =	11/30/2012	Checked By =	CA

GCI Compound, 04-210
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

Site Name =	**2012 Adak Long Term Monitoring TO 55**		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	**3800**					
2	10/01/07	**5900**					
3	10/01/08	**6900**					
4	10/01/09	**4400**					
5	10/01/10	**3300**					
6	10/01/11	**4000**					
7	09/01/12	**3900**					
8							
9							
10							

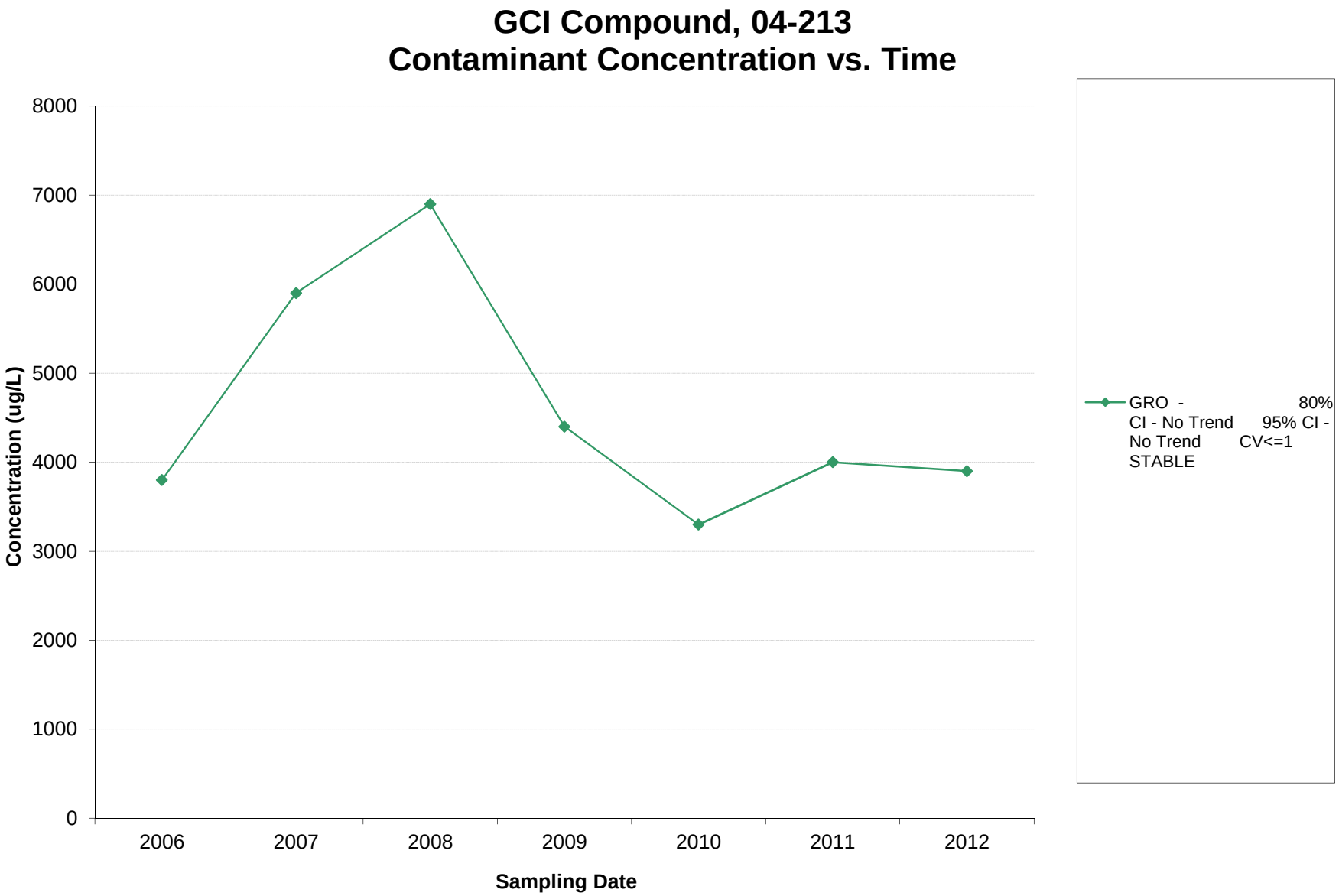
Mann Kendall Statistic (S) =	-5	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	4600.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1303.840	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.283	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

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 =	RB	Date =	11/30/2012	Checked By =	CA


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
Sampling Date
GRO - 80% CI - No Trend 95% CI - No Trend CV<=1 STABLE

Mann-Kendall Statistical Test

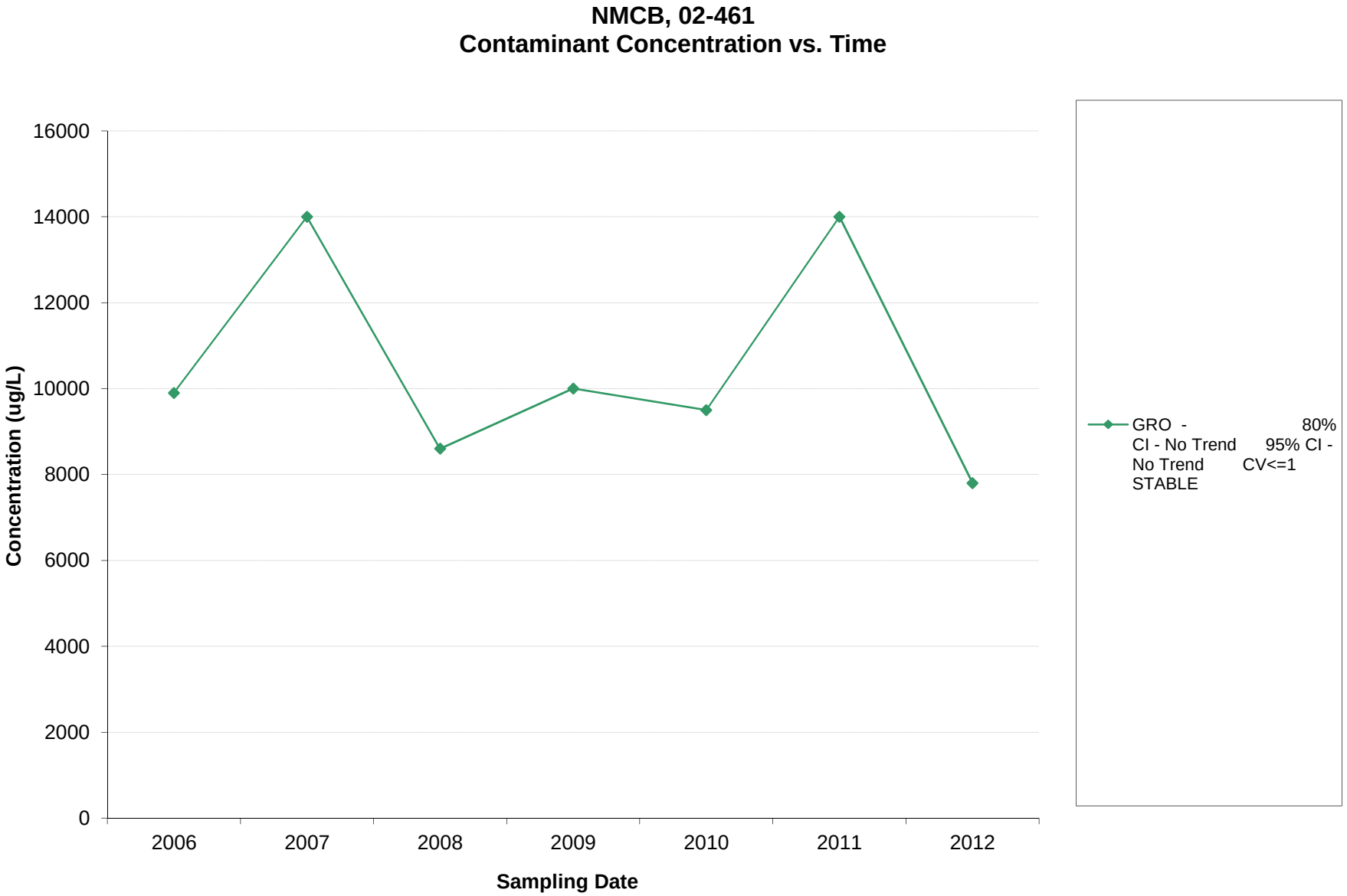
Site Name =	**2012 Adak Long Term Monitoring TO 55**	Site ID No. = **NMCB**	Well Number =	**02-461**

	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	09/01/12	**7800**					
8							
9							
10							

Mann Kendall Statistic (S) =	-4	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	10542.86	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2483.182	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.236	#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 =	RB	Date =	11/30/2012	Checked By =	CA


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
Sampling Date
GRO - 80% CI - No Trend 95% CI - No Trend CV<=1 STABLE

Mann-Kendall Statistical Test

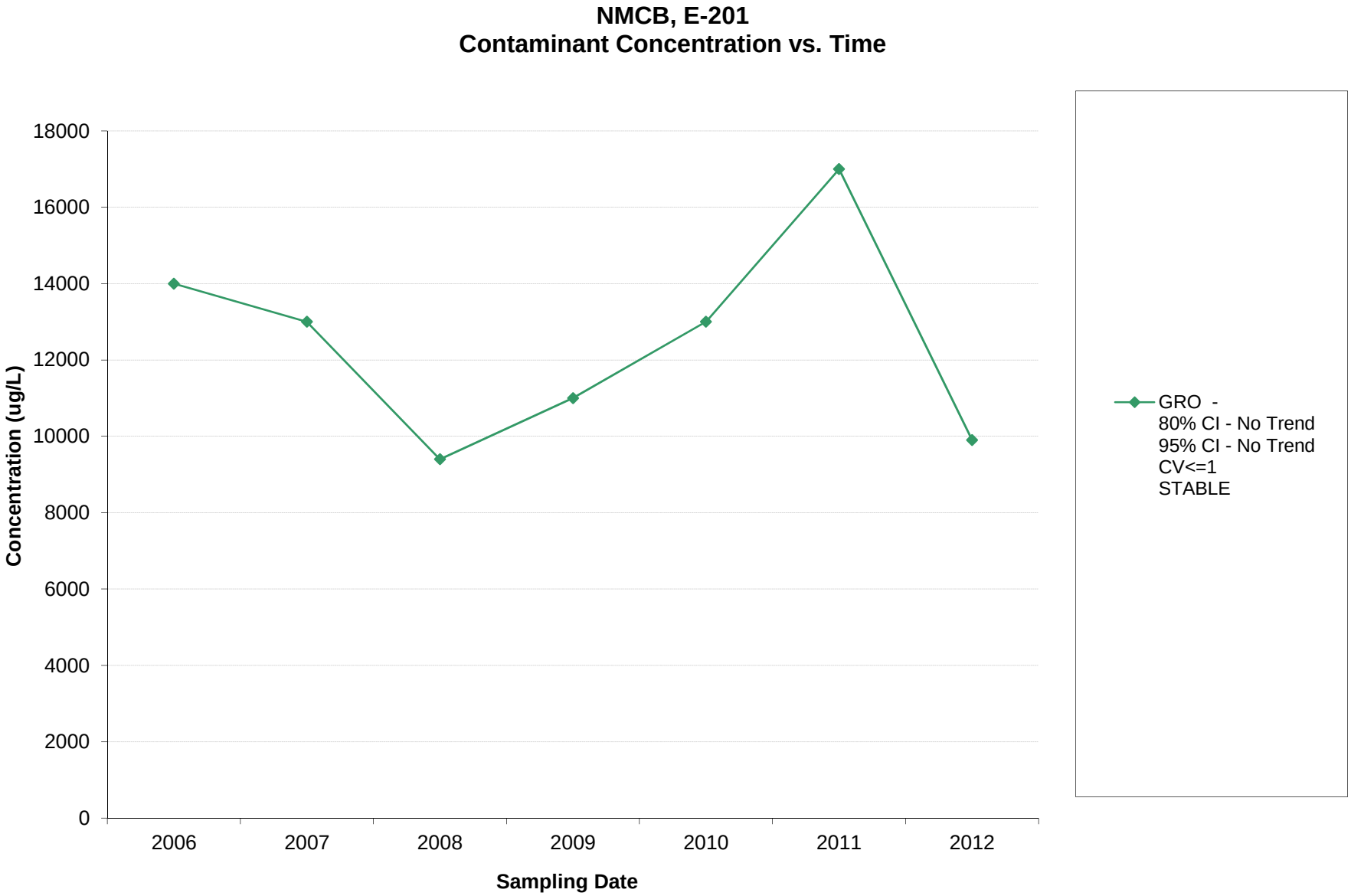
Site Name =	**2012 Adak Long Term Monitoring TO 55**	Site ID No. = **NMCB**	Well Number =	**E-201**

	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	**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	09/01/12	**9900**					
8							
9							
10							

Mann Kendall Statistic (S) =	-2	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	12471.43	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2633.574	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.211	#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 =	RB	Date =	11/30/2012	Checked By =	CA


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
Sampling Date
GRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

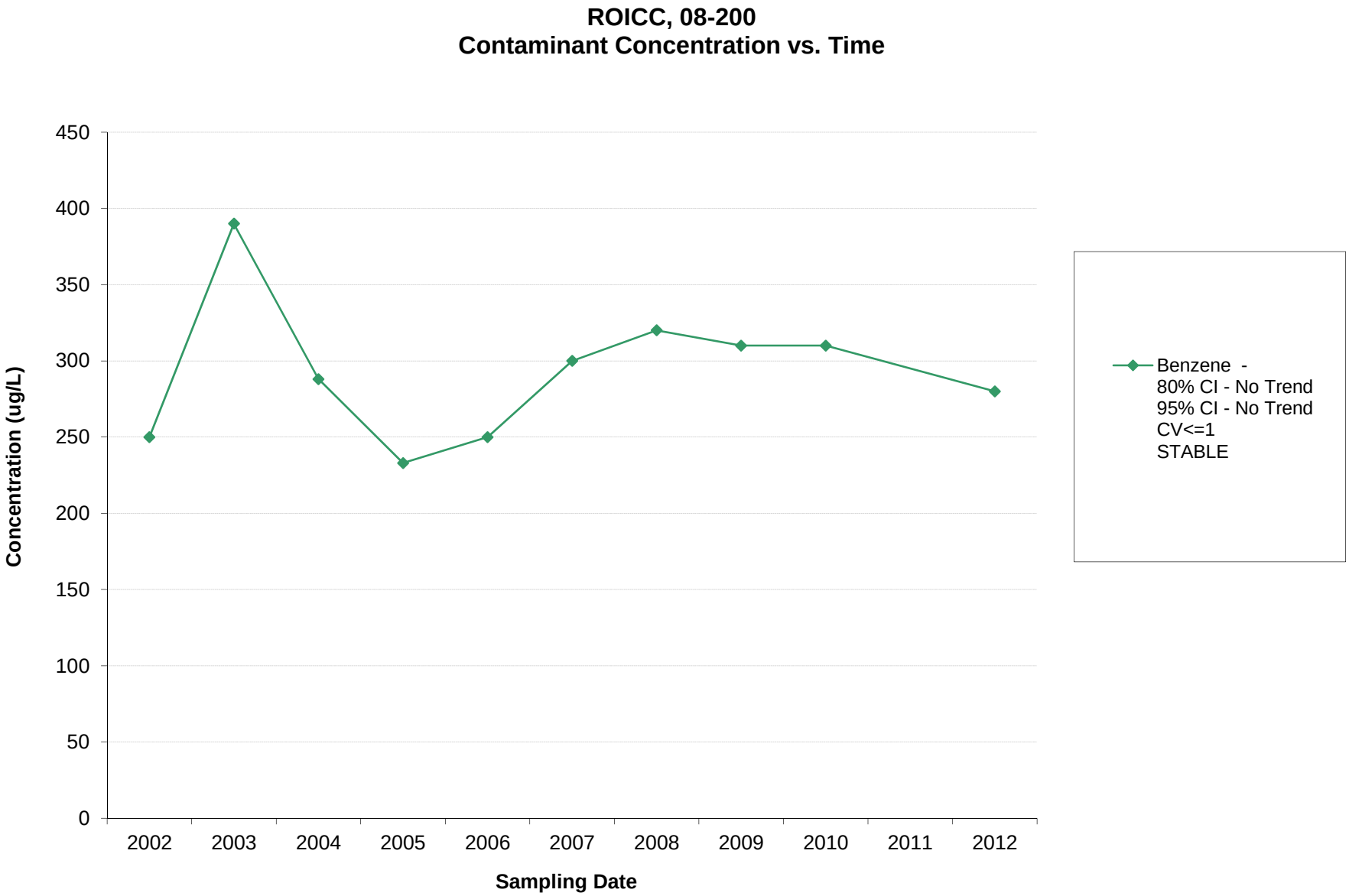
Site Name =	**2012 Adak Long Term Monitoring TO 55**	Site ID No. = **ROICC**	Well Number =	**08-200**

	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	10/01/02	**250**					
2	10/01/03	**390**					
3	10/01/04	**288**					
4	10/01/05	**233**					
5	10/01/06	**250**					
6	10/01/07	**300**					
7	10/01/08	**320**					
8	10/01/09	**310**					
9	10/01/10	**310**					
10	09/01/12	**280**					

Mann Kendall Statistic (S) =	7	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	293.10	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	45.039	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.154	#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**

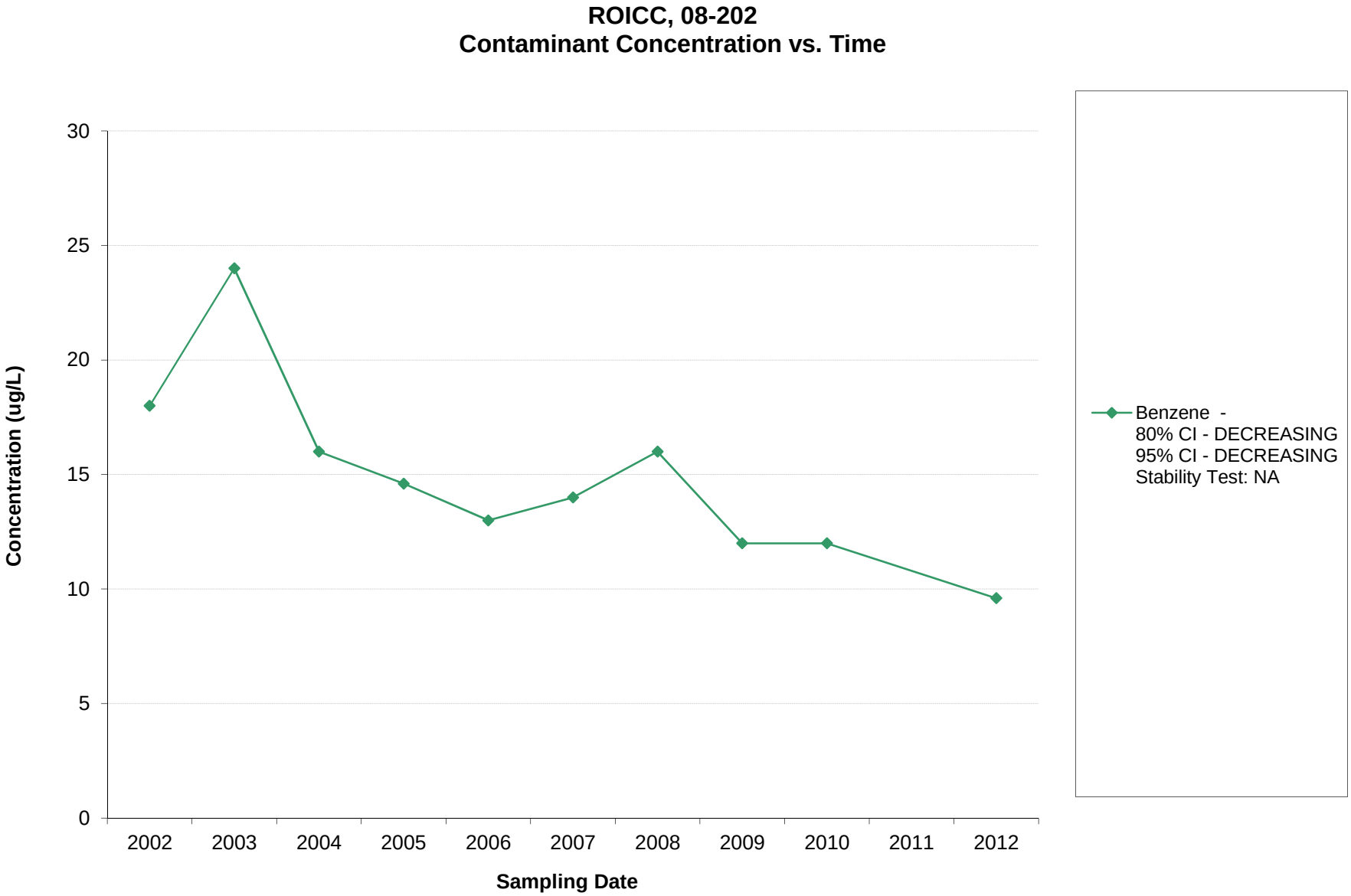
Data Entry By =	RB	Date =	11/30/2012	Checked By =	CA


ROICC, 08-200
Contaminant Concentration vs. Time
Concentration (ug/L)
450
400
350
300
250
200
150
100
50
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Sampling Date
Benzene -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

Site Name =	**2012 Adak Long Term Monitoring TO 55**		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	10/01/02	**18**					
2	10/01/03	**24**					
3	10/01/04	**16**					
4	10/01/05	**14.6**					
5	10/01/06	**13**					
6	10/01/07	**14**					
7	10/01/08	**16**					
8	10/01/09	**12**					
9	10/01/10	**12**					
10	09/01/12	**9.6**					
	Mann Kendall Statistic (S) =	-33	0	0	0	0	0
	Number of Rounds (n) =	10	0	0	0	0	0
	Average =	14.92	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Standard Deviation =	4.004	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.268	#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			**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 =	RB	Date =	11/30/2012	Checked By =	CA


ROICC, 08-202
Contaminant Concentration vs. Time
Concentration (ug/L)
30
25
20
15
10
5
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Sampling Date
Benzene -
80% CI - DECREASING
95% CI - DECREASING
Stability Test: NA

Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	Runway 5-23	Well Number =	14-100

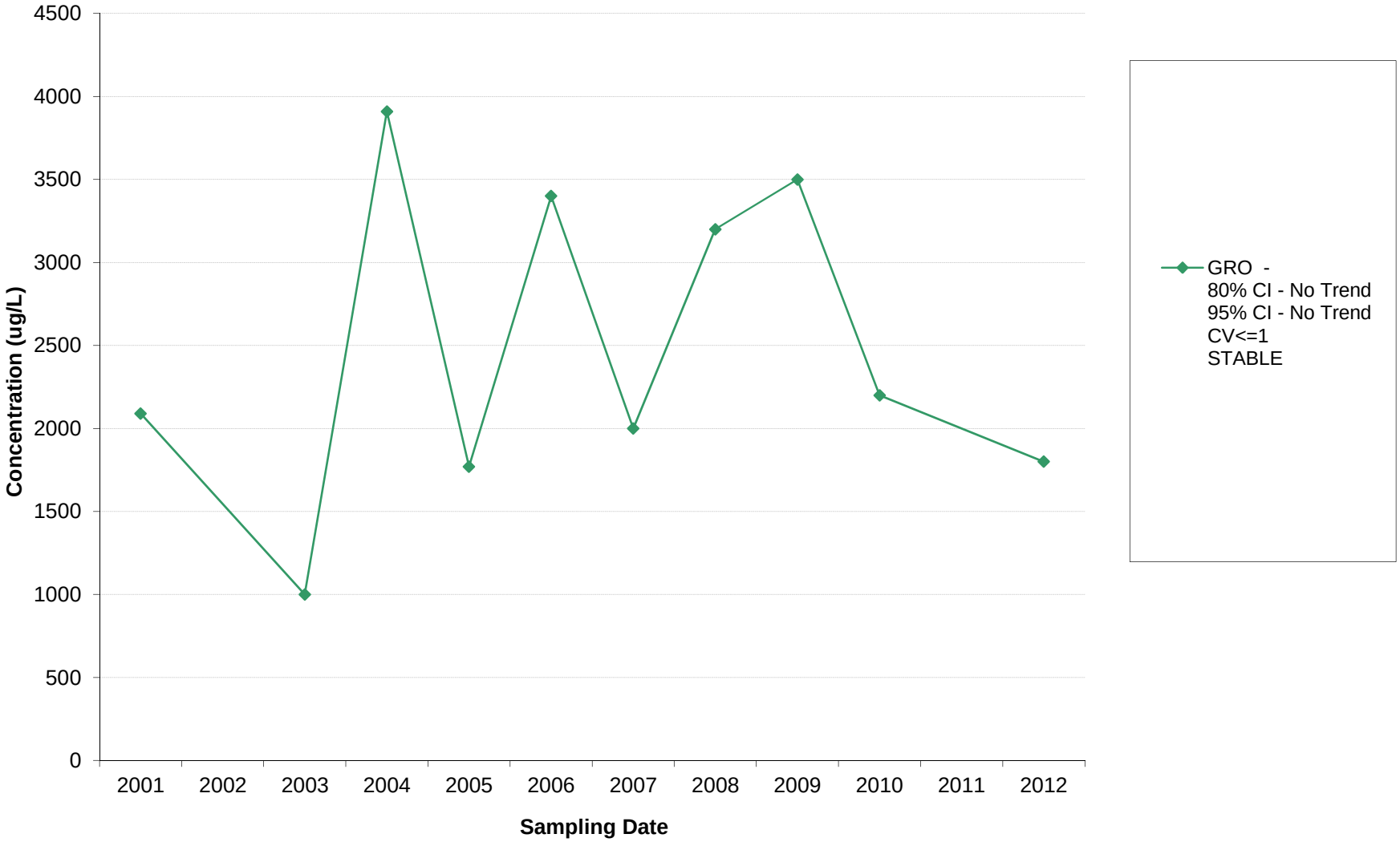
	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/01	**2090**					
2	10/01/03	**1000**					
3	10/01/04	**3910**					
4	10/01/05	**1770**					
5	10/01/06	**3400**					
6	10/01/07	**2000**					
7	10/01/08	**3200**					
8	10/01/09	**3500**					
9	10/01/10	**2200**					
10	09/01/12	**1800**					

Mann Kendall Statistic (S) =	3	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	2487.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	946.773	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.381	#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 =	RB	Date =	11/30/2012	Checked By =	CA

Runway 5-23 Avgas Valve Pit, 14-100
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

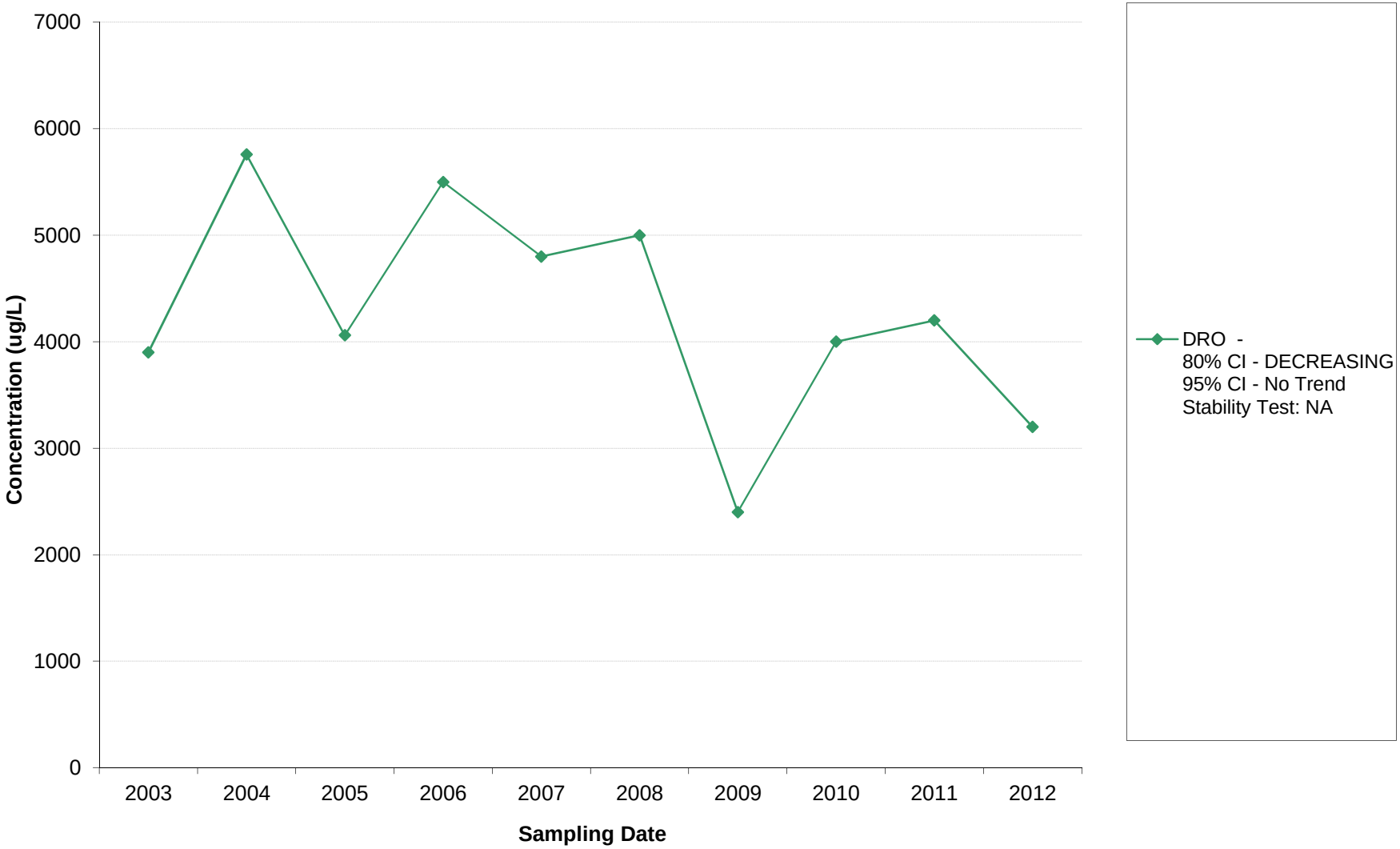
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SA 79	Well Number =	02-230

	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	10/01/03	**3900**					
2	10/01/04	**5760**					
3	10/01/05	**4060**					
4	10/01/06	**5500**					
5	10/01/07	**4800**					
6	10/01/08	**5000**					
7	10/01/09	**2400**					
8	10/01/10	**4000**					
9	10/01/11	**4200**					
10	09/01/12	**3200**					

Mann Kendall Statistic (S) =	-13	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	4282.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1024.476	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.239	#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 =	RB	Date =	11/30/2012	Checked By =	CA

SA 79 Main Road Pipeline, 02-230
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SA 79	Well Number =	MRP-MW8

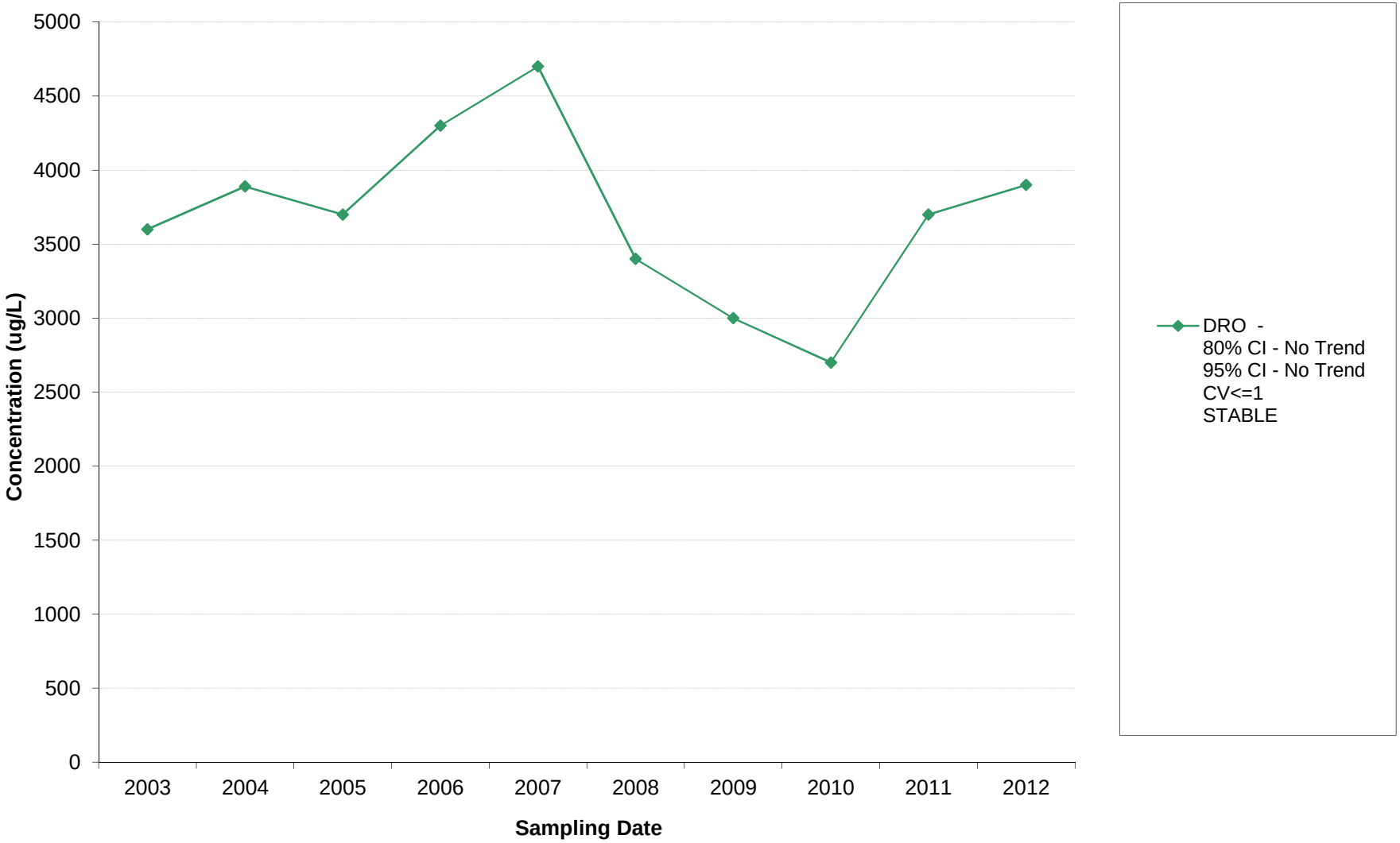
	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/03	**3600**					
2	10/01/04	**3890**					
3	10/01/05	**3700**					
4	10/01/06	**4300**					
5	10/01/07	**4700**					
6	10/01/08	**3400**					
7	10/01/09	**3000**					
8	10/01/10	**2700**					
9	10/01/11	**3700**					
10	09/01/12	**3900**					

Mann Kendall Statistic (S) =	-4	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	**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 =	RB	Date =	11/30/2012	Checked By =	AF

SA 79 Main Road Pipeline, MRP-MW8
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

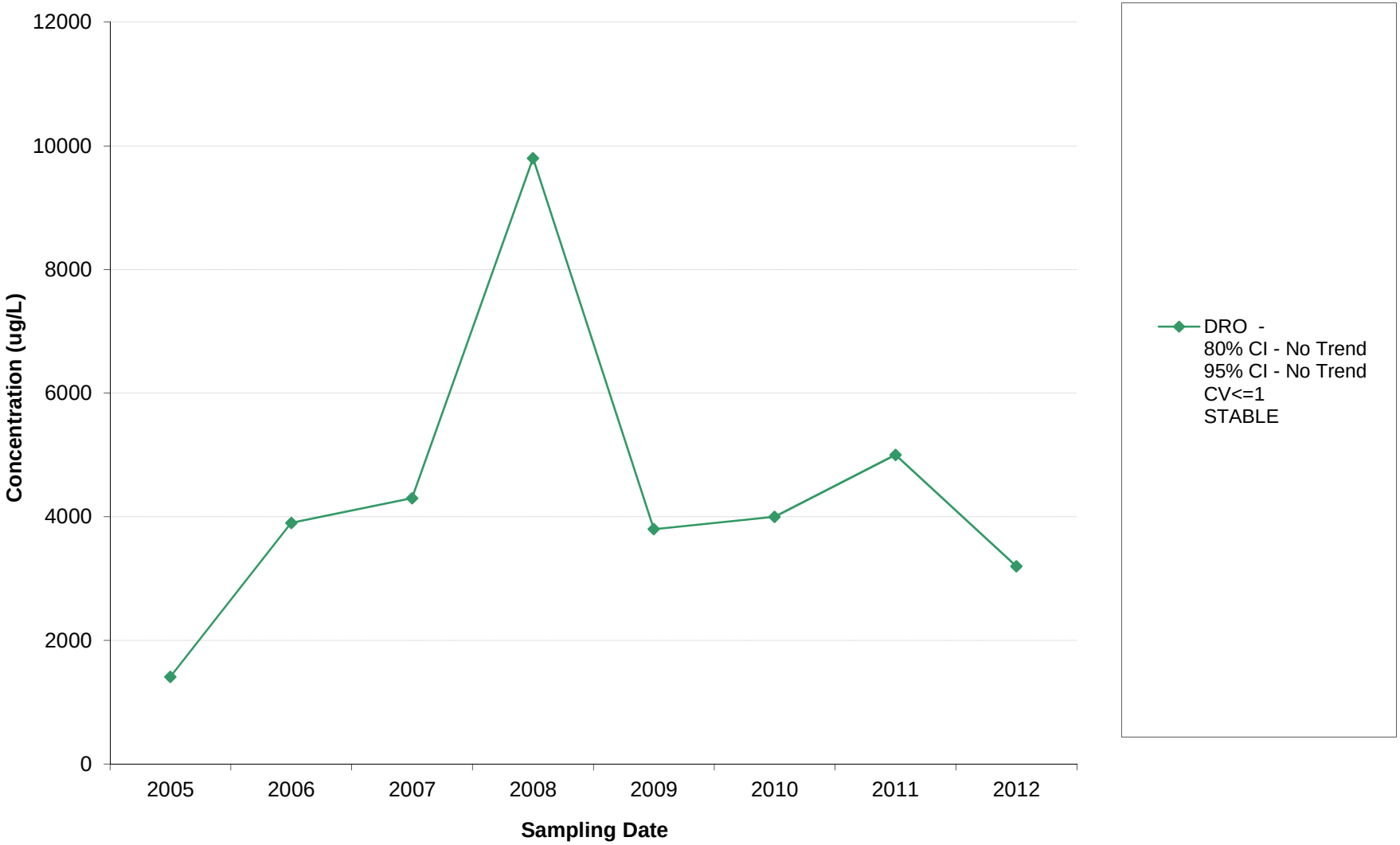
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SA 80	Well Number =	04-159

	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	**1410**					
2	10/01/06	**3900**					
3	10/01/07	**4300**					
4	10/01/08	**9800**					
5	10/01/09	**3800**					
6	10/01/10	**4000**					
7	10/02/11	**5000**					
8	09/01/12	**3200**					
9							
10							

Mann Kendall Statistic (S) =	4	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	4426.25	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2410.530	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.545	#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 =	RB	Date =	11/30/2012	Checked By =	CA

SA 80 Steam Plant 4, 04-159
Contaminant Concentration vs. Time



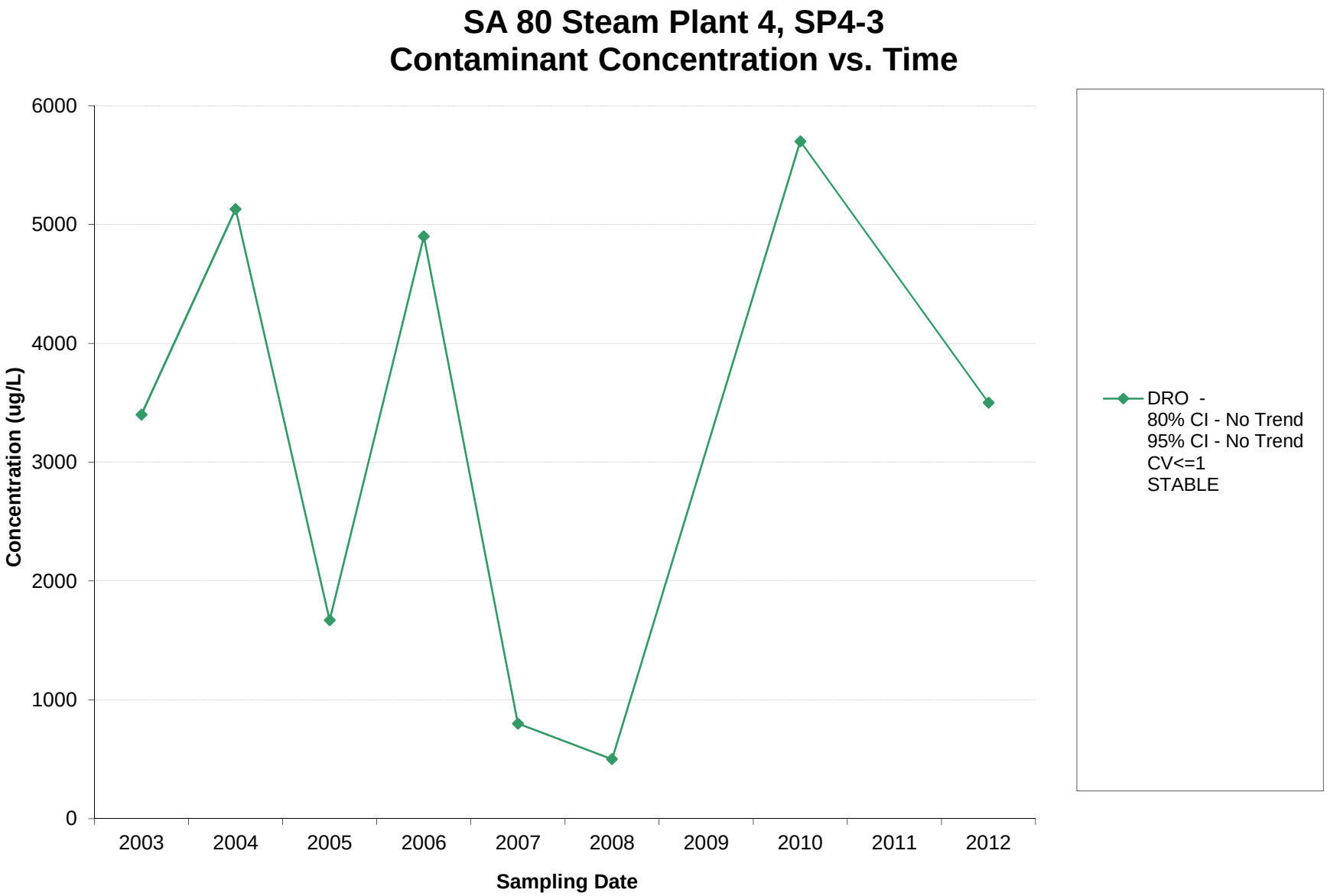
Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SA 80	Well Number =	SP4-3

Event Number	Sampling Date (most recent last)	Compound -> DRO 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	08/01/12	**3,500**					
9							
10							

Mann Kendall Statistic (S) =	-2	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	3200.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2013.731	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.629	#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 =	12/14/2012	Checked By =	RB


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
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 14	Well Number =	01-153

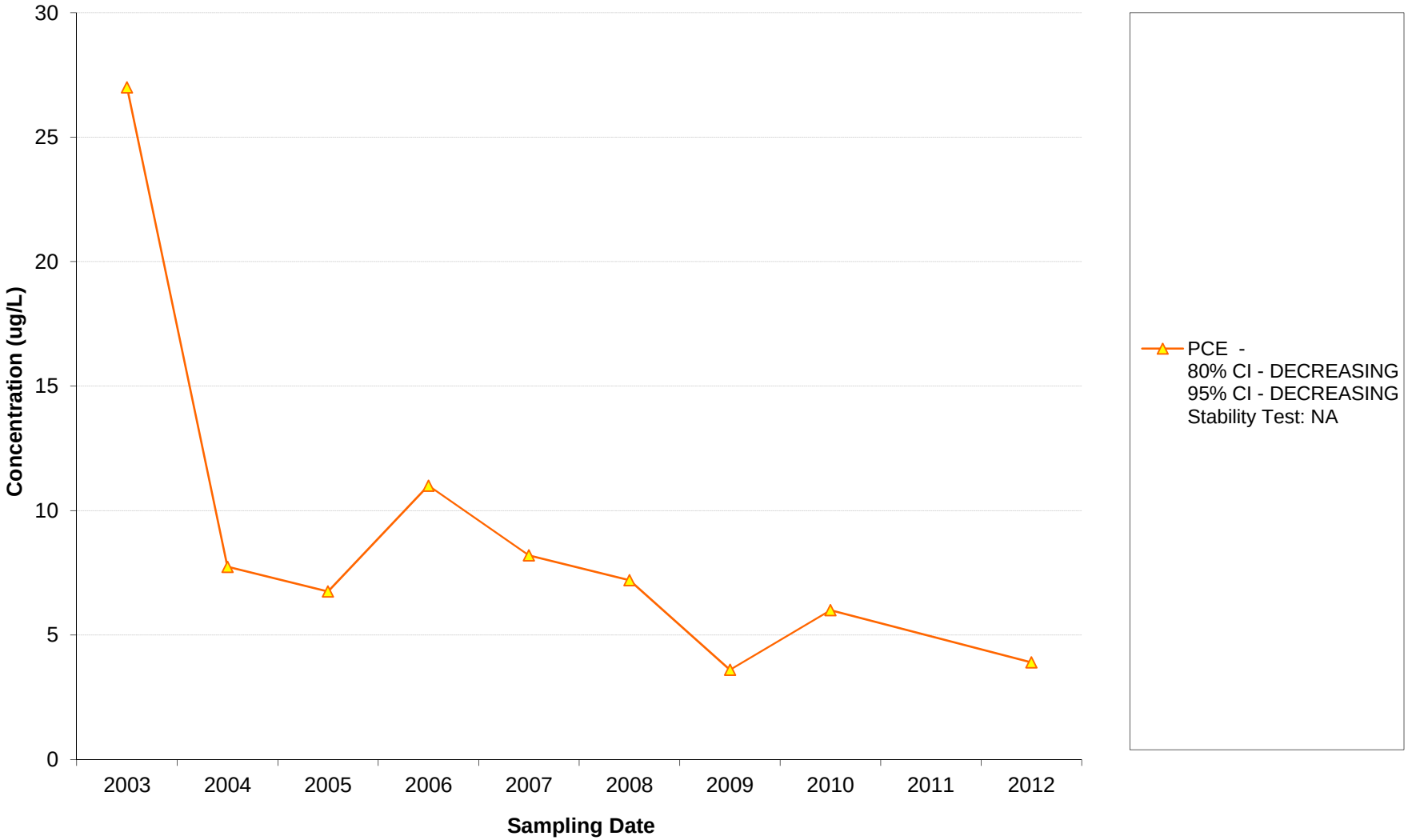
	Compound ->	PCE					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/03	**27**					
2	10/01/04	**7.74**					
3	10/01/05	**6.75**					
4	10/01/06	**11**					
5	10/01/07	**8.2**					
6	10/01/08	**7.2**					
7	10/01/09	**3.6**					
8	10/01/10	**6**					
9	09/01/12	**3.9**					
10							

Mann Kendall Statistic (S) =	-22	0	0	0	0	0
Number of Rounds (n) =	9	0	0	0	0	0
Average =	9.04	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	7.095	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.785	#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		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 =	RB	Date =	12/11/2012	Checked By =	CA

SWMU 14, 01-153
Contaminant Concentration vs. Time

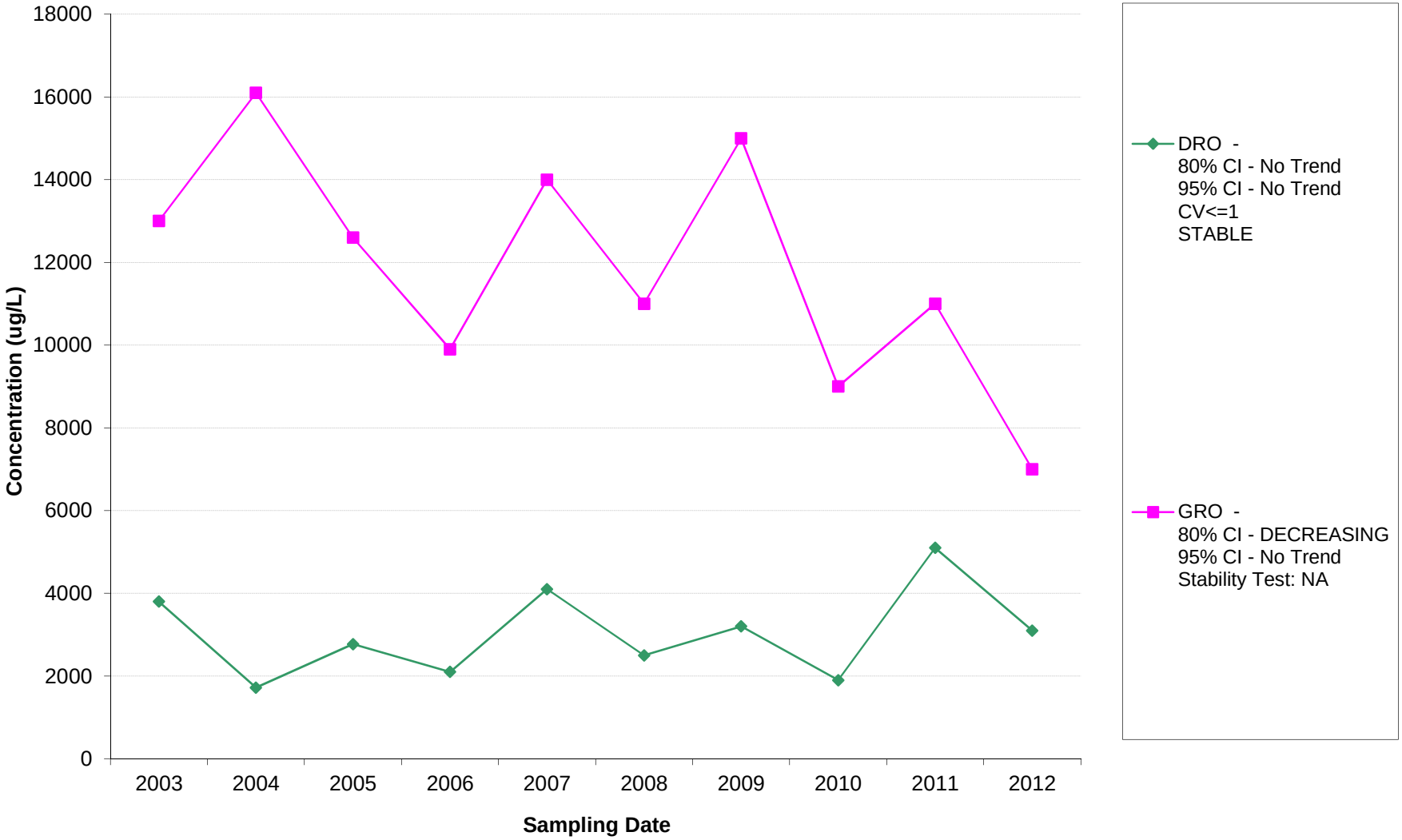


Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55			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	10/01/03	**3800**	**13000**				
2	10/01/04	**1720**	**16100**				
3	10/01/05	**2770**	**12600**				
4	10/01/06	**2100**	**9900**				
5	10/01/07	**4100**	**14000**				
6	10/01/08	**2500**	**11000**				
7	10/01/09	**3200**	**15000**				
8	10/01/10	**1900**	**9000**				
9	10/01/11	**5100**	**11000**				
10	09/01/12	**3100**	**7000**				
	Mann Kendall Statistic (S) =	7	-20	0	0	0	0
	Number of Rounds (n) =	10	10	0	0	0	0
	Average =	3029.00	11860.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Standard Deviation =	1067.858	2816.302	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.353	0.237	#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		**CV<=1**		**n<4**	**n<4**	**n<4**	**n<4**
80% Confidence Level		**STABLE**	**NA**	**n<4**	**n<4**	**n<4**	**n<4**

Data Entry By =	RB	Date =	11/30/2012	Checked By =	CA

SWMU 14, MW14-5
Contaminant Concentration vs. Time



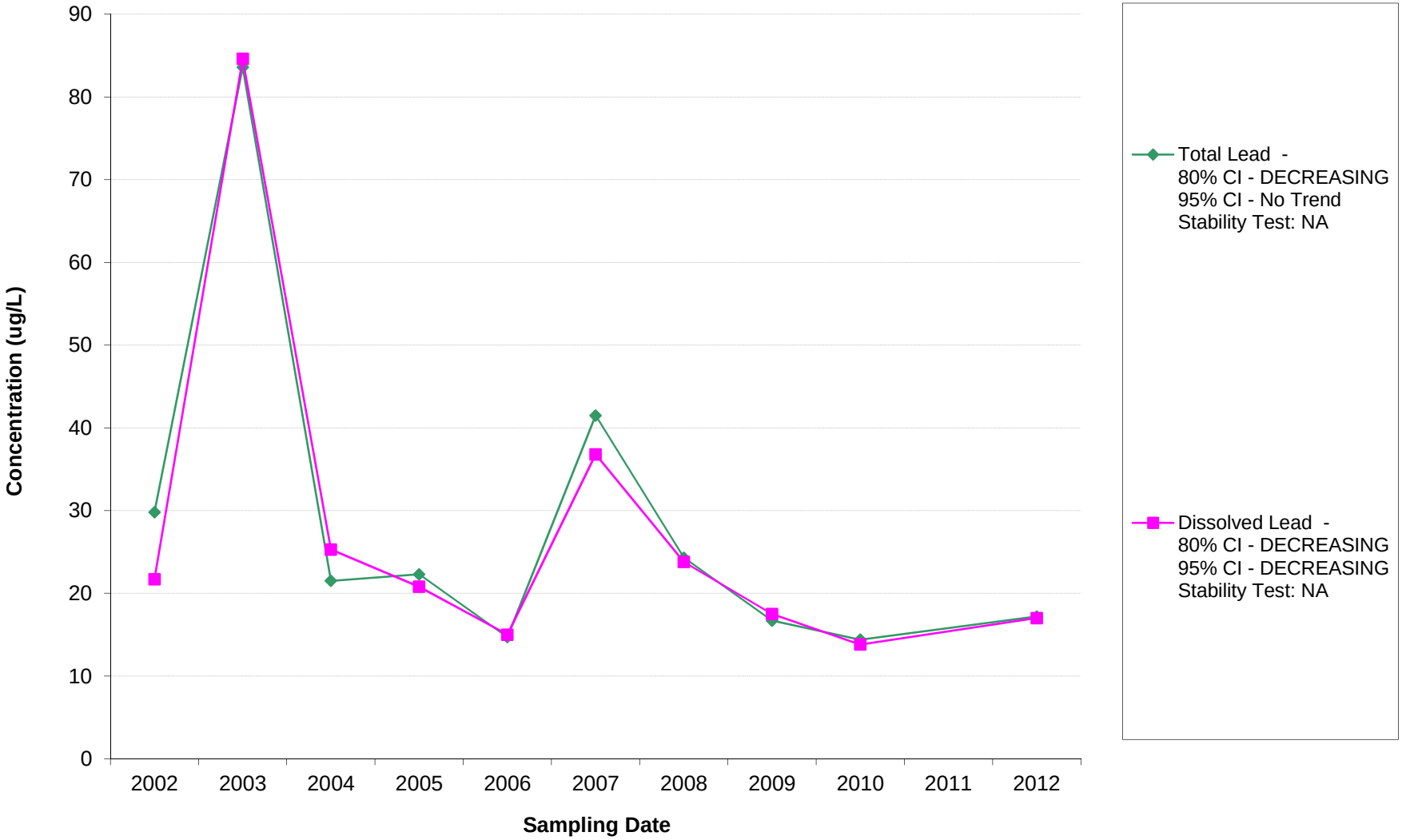
Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 14	Well Number =	MW14-5

Event Number	Sampling Date (most recent last)	Compound -> Total Lead Concentration (leave blank if no data - 0 if ND)	Dissolved Lead 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	**29.8**	**21.7**				
2	10/01/03	**83.6**	**84.6**				
3	10/01/04	**21.5**	**25.3**				
4	10/01/05	**22.3**	**20.8**				
5	10/01/06	**14.7**	**15**				
6	10/01/07	**41.5**	**36.8**				
7	10/01/08	**24.3**	**23.8**				
8	10/01/09	**16.7**	**17.5**				
9	10/01/10	**14.4**	**13.8**				
10	09/01/12	**17.2**	**17**				
	Mann Kendall Statistic (S) =	-19	-21	0	0	0	0
	Number of Rounds (n) =	10	10	0	0	0	0
	Average =	28.60	27.63	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Standard Deviation =	20.997	21.077	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.734	0.763	#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**		**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 =	RB	Date =	12/11/2012	Checked By =	CA

SWMU 14, MW14-5
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

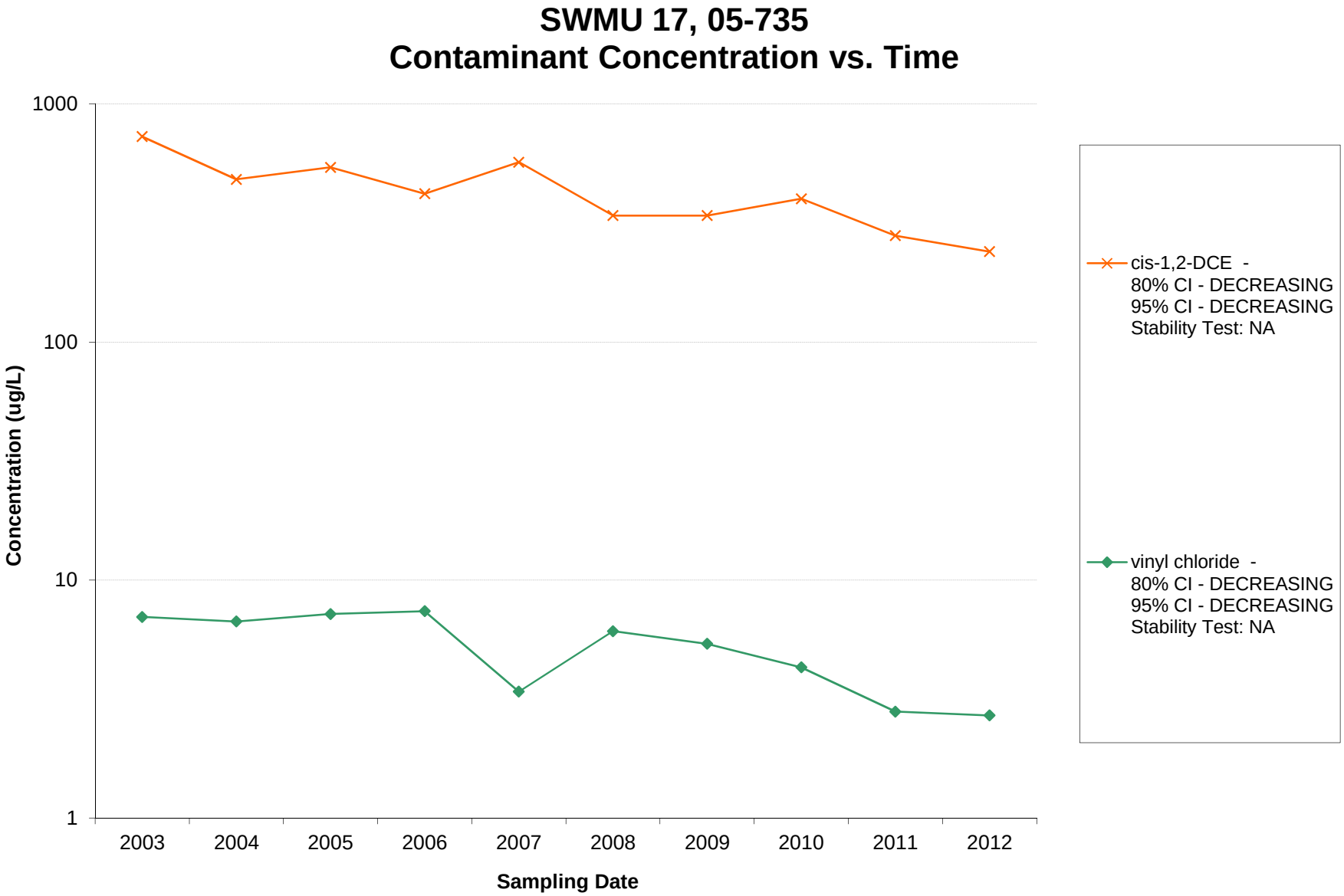
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 17	Well Number =	05-735

	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	10/01/03	**730**	**7**				
2	10/01/04	**483**	**6.7**				
3	10/01/05	**542**	**7.2**				
4	10/01/06	**420**	**7.4**				
5	10/01/07	**570**	**3.4**				
6	10/01/08	**340**	**6.1**				
7	10/01/09	**340**	**5.4**				
8	10/01/10	**400**	**4.3**				
9	10/01/11	**280**	**2.8**				
10	09/01/12	**240**	**2.7**				

Mann Kendall Statistic (S) =	-32	-29	0	0	0	0
Number of Rounds (n) =	10	10	0	0	0	0
Average =	434.50	5.30	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	149.276	1.860	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.344	0.351	#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			**n<4**	**n<4**	**n<4**	**n<4**
80% Confidence Level	**NA**	**NA**	**n<4**	**n<4**	**n<4**	**n<4**

Data Entry By =	RB	Date =	11/30/2012	Checked By =	CA


SWMU 17, 05-735
Contaminant Concentration vs. Time
1000
100
10
1
Concentration (ug/L)
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
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

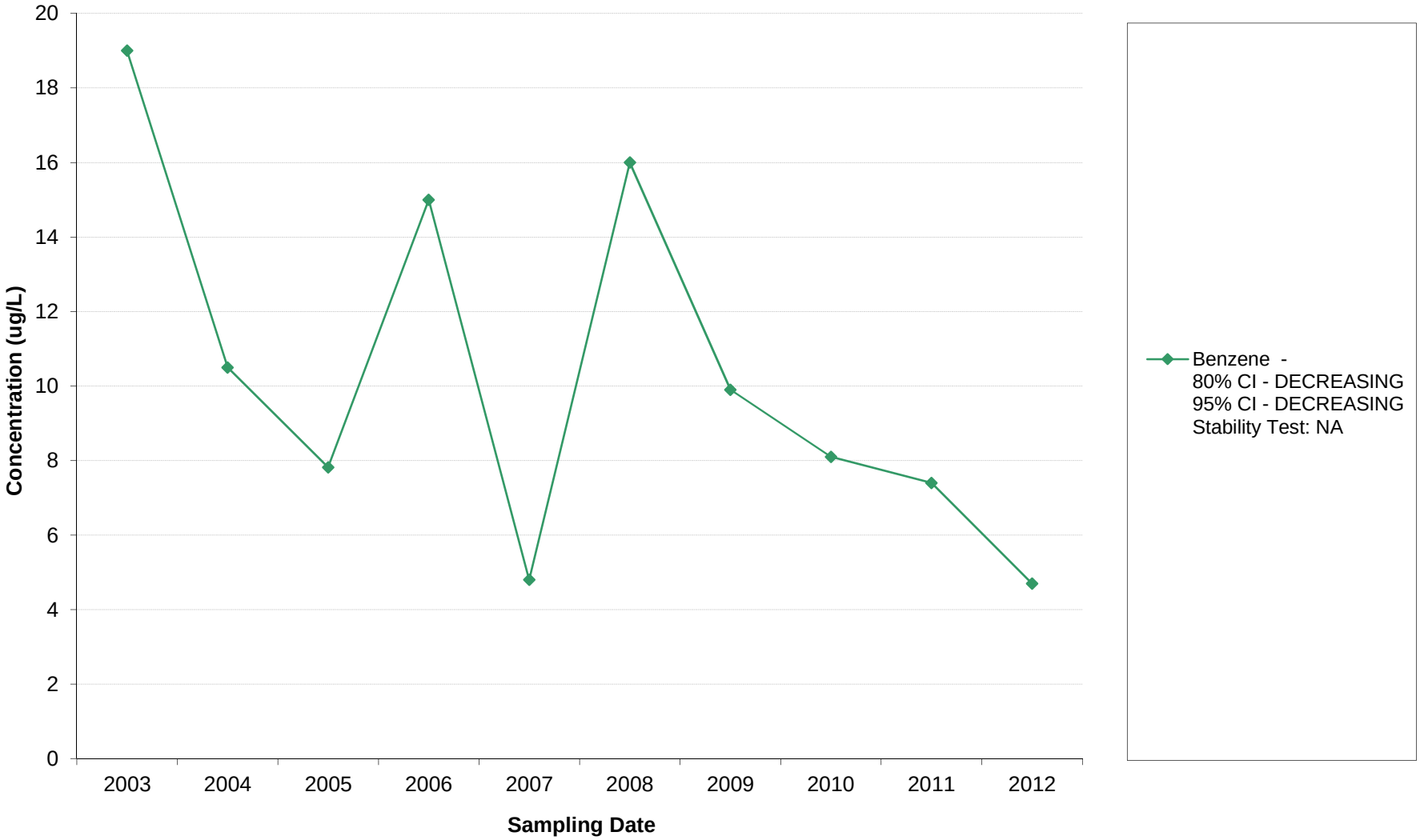
Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 60	Well Number =	MW-E006

	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	**19**					
2	10/01/04	**10.5**					
3	10/01/05	**7.82**					
4	10/01/06	**15**					
5	10/01/07	**4.8**					
6	10/01/08	**16**					
7	10/01/09	**9.9**					
8	10/01/10	**8.1**					
9	10/01/11	**7.4**					
10	09/01/12	**4.7**					
	Mann Kendall Statistic (S) =	-23	0	0	0	0	0
	Number of Rounds (n) =	10	0	0	0	0	0
	Average =	10.32	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Standard Deviation =	4.847	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.470	#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			**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 =	RB	Date =	11/30/2012	Checked By =	CA

SWMU 60, MW-E006
Contaminant Concentration vs. Time



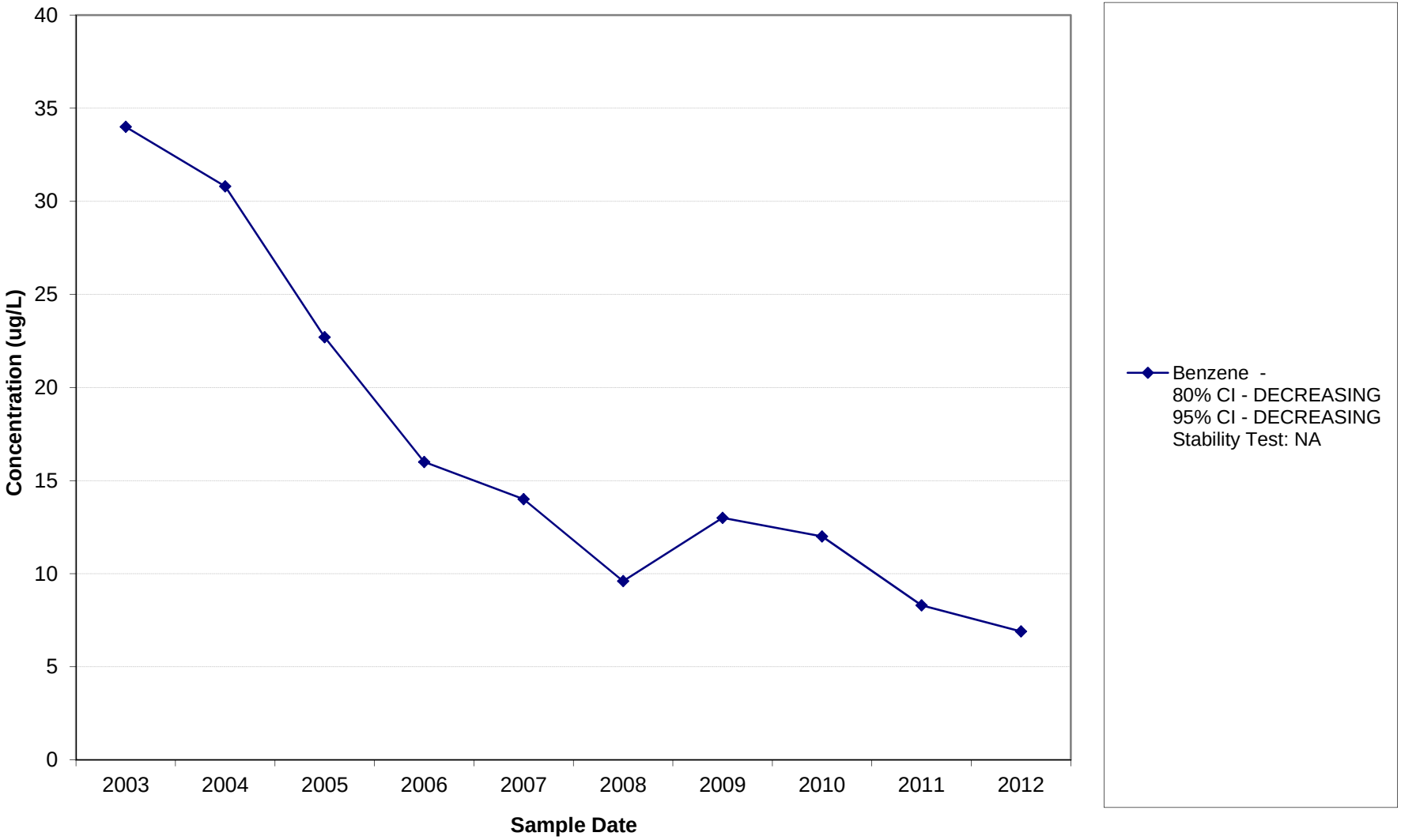
Mann-Kendall Statistical Test

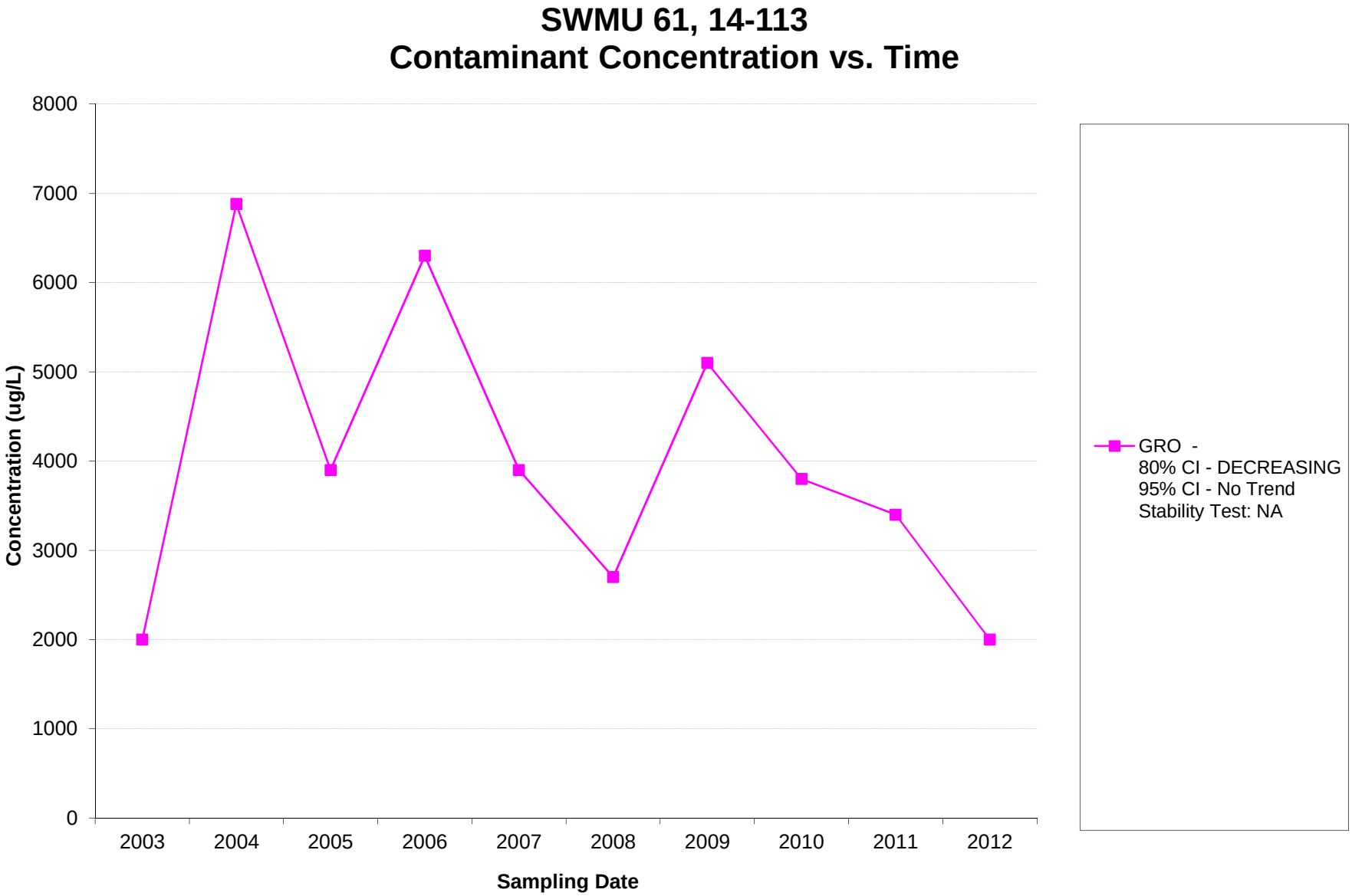
Site Name =	**2012 Adak Long Term Monitoring TO 55**	Site ID No. =	**SWMU 61**	Well Number =	**14-113**

Event Number	Sampling Date (most recent last)	Compound -> **Benzene** Concentration (leave blank if no data - 0 if ND)	**GRO** 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	**34**	**2000**				
2	10/01/04	**30.8**	**6880**				
3	10/01/05	**22.7**	**3900**				
4	10/01/06	**16**	**6300**				
5	10/01/07	**14**	**3900**				
6	10/01/08	**9.6**	**2700**				
7	10/01/09	**13**	**5100**				
8	10/01/10	**12**	**3800**				
9	10/01/11	**8.3**	**3400**				
10	09/01/12	**6.9**	**2000**				
	Mann Kendall Statistic (S) =	-41	-15	0	0	0	0
	Number of Rounds (n) =	10	10	0	0	0	0
	Average =	16.73	3998.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Standard Deviation =	9.397	1663.476	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.562	0.416	#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**	**No Trend**	**N<4**	**N<4**	**N<4**	**N<4**
Stability Test, If No Trend Exists at				**n<4**	**n<4**	**n<4**	**n<4**
80% Confidence Level		**NA**	**NA**	**n<4**	**n<4**	**n<4**	**n<4**

Data Entry By =	RB	Date =	11/30/2012	Checked By =	CA

SWMU 61, 14-113
Contamination Concentration vs. Time




SWMU 61, 14-113
Contaminant Concentration vs. Time
Concentration (ug/L)
8000
7000
6000
5000
4000
3000
2000
1000
0
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Sampling Date
GRO -
80% CI - DECREASING
95% CI - No Trend
Stability Test: NA

Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 61	Well Number =	14-210

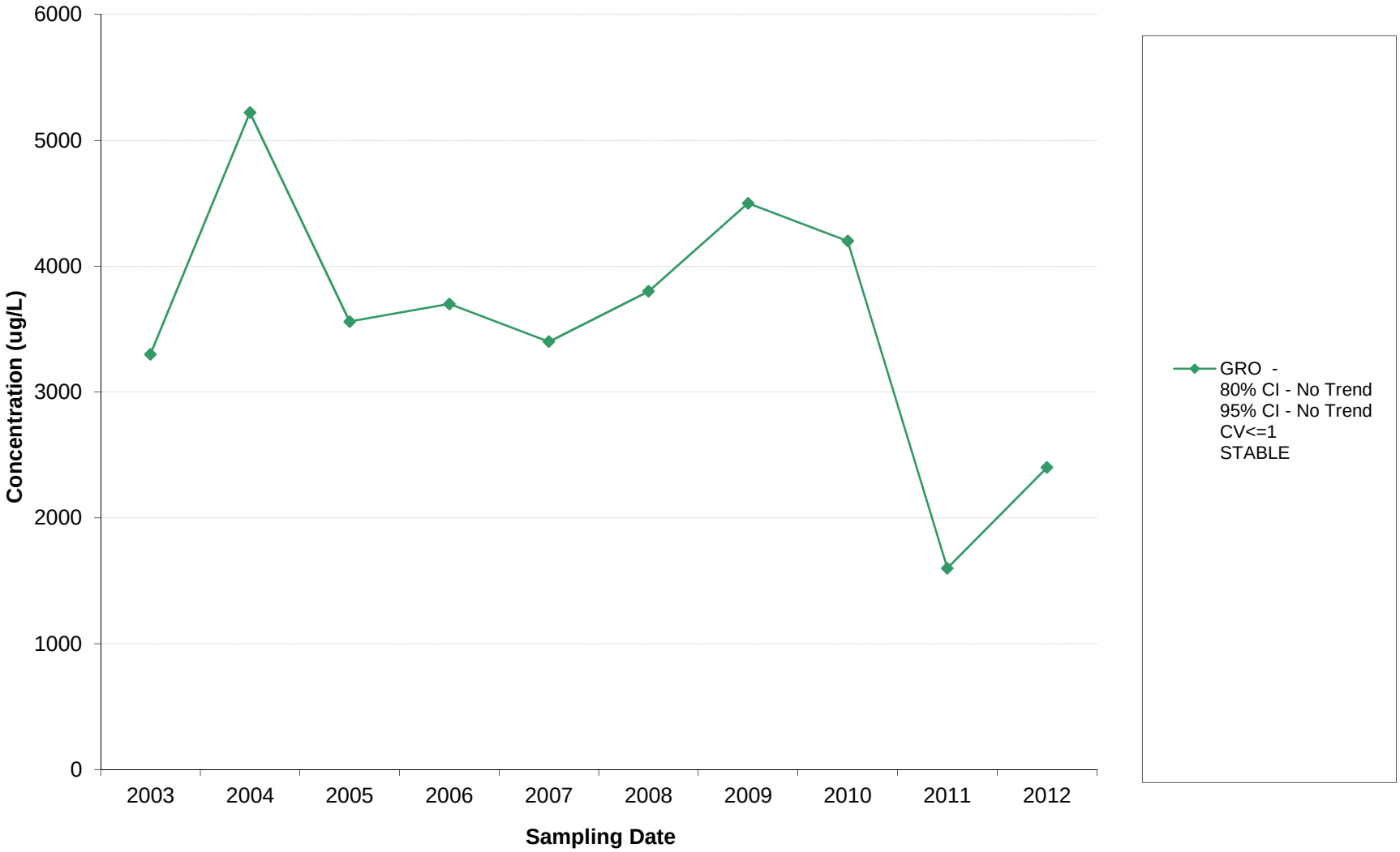
	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/03	**3300**					
2	10/01/04	**5220**					
3	10/01/05	**3560**					
4	10/01/06	**3700**					
5	10/01/07	**3400**					
6	10/01/08	**3800**					
7	10/01/09	**4500**					
8	10/01/10	**4200**					
9	10/01/11	**1600**					
10	09/01/12	**2400**					

Mann Kendall Statistic (S) =	-5	0	0	0	0	0
Number of Rounds (n) =	10	0	0	0	0	0
Average =	3568.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1022.294	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.287	#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 =	RB	Date =	11/30/2012	Checked By =	CA

SWMU 61, 14-210
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 61	Well Number =	TFB-MW4B

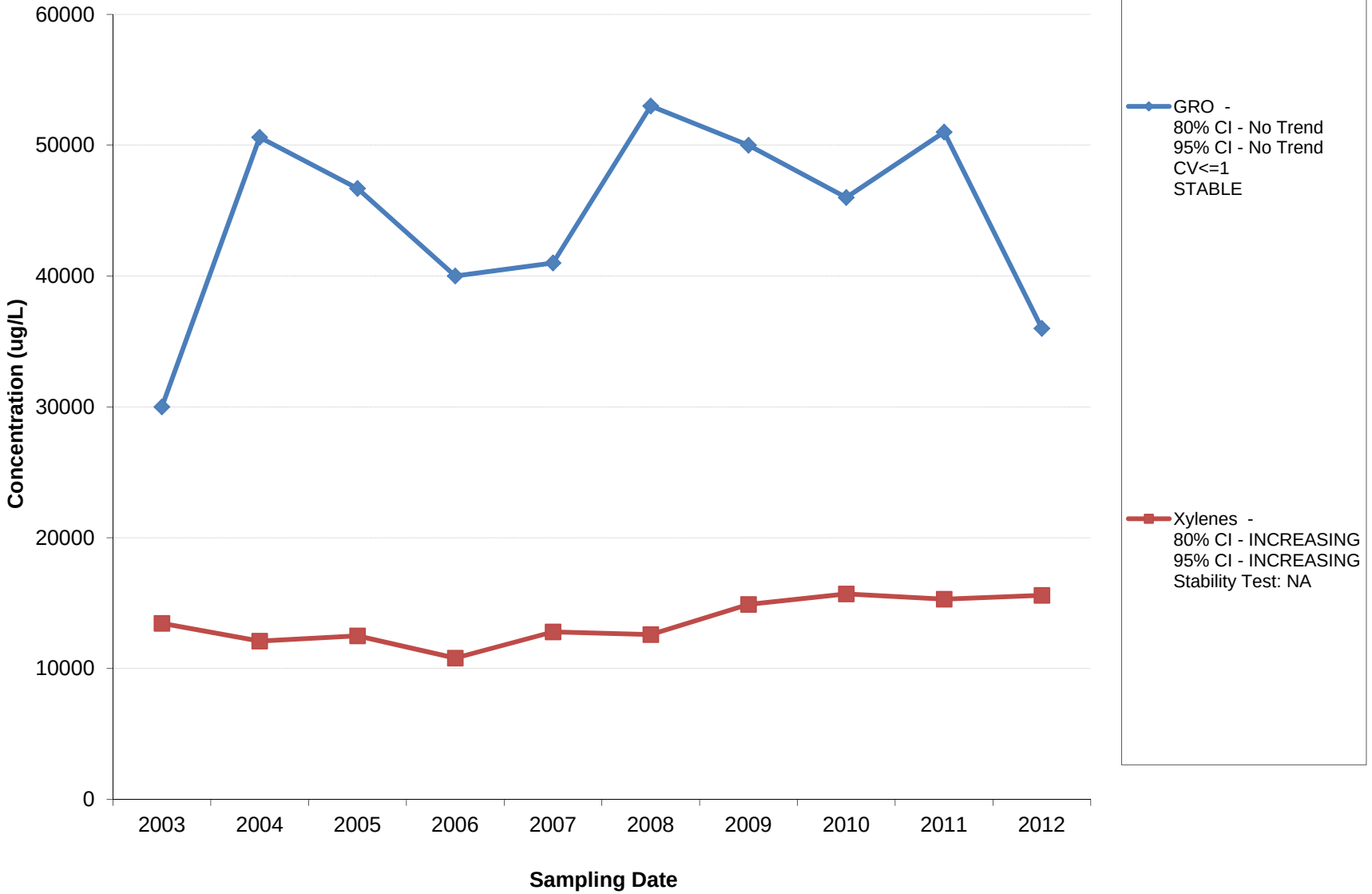
	Compound ->	Benzene	GRO	Toluene	Ethylbenzene	Xylenes	
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/03	**73**	**30000**	**5600**	**2200**	**13456**	
2	10/01/04	**69**	**50600**	**6110**	**1660**	**12100**	
3	10/01/05	**49.5**	**46700**	**4580**	**1750**	**12500**	
4	10/01/06	**31**	**40000**	**3500**	**1400**	**10800**	
5	10/01/07	**39**	**41000**	**4100**	**1700**	**12800**	
6	10/01/08	**29**	**53000**	**4400**	**1600**	**12600**	
7	10/01/09	**31**	**50000**	**4800**	**2000**	**14900**	
8	10/01/10	**30**	**46000**	**4600**	**2100**	**15700**	
9	10/01/11	**23**	**51000**	**4100**	**1900**	**15300**	
10	09/01/12	**24**	**36000**	**4800**	**2100**	**15600**	

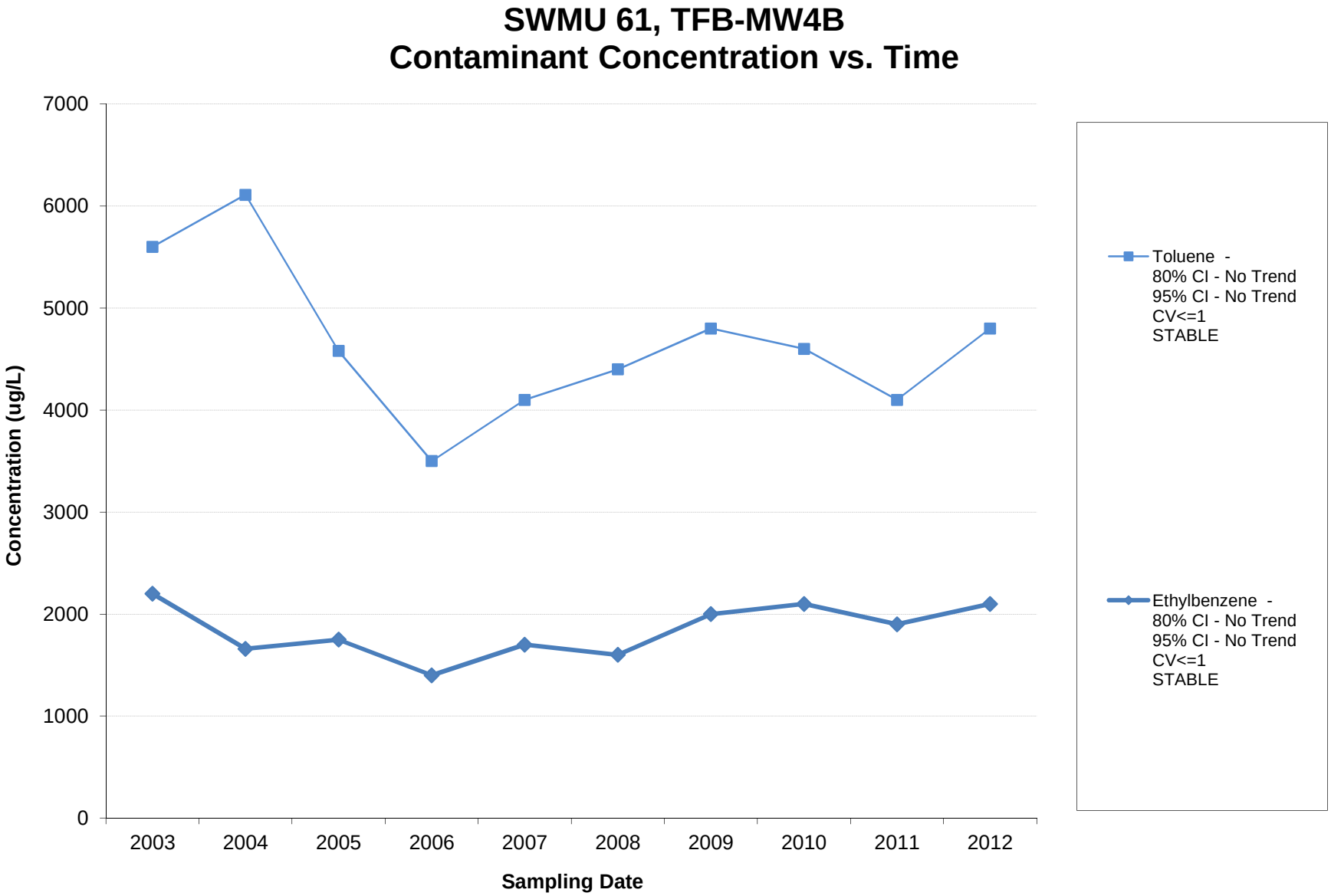
Mann Kendall Statistic (S) =	-36	5	-5	10	25	0
Number of Rounds (n) =	10	10	10	10	10	0
Average =	39.85	44430.00	4659.00	1841.00	13575.60	#DIV/0!
Standard Deviation =	18.102	7483.322	750.976	259.335	1697.867	#DIV/0!
Coefficient of Variation(CV)=	0.454	0.168	0.161	0.141	0.125	#DIV/0!

Error Check, Blank if No Errors Detected						N<4
Trend at **80% Confidence Level**	**DECREASING**	**No Trend**	**No Trend**	**No Trend**	**INCREASING**	**N<4**
Trend at **95% Confidence Level**	**DECREASING**	**No Trend**	**No Trend**	**No Trend**	**INCREASING**	**N<4**
Stability Test, If No Trend Exists at 80% Confidence Level	**NA**	**CV<=1 STABLE**	**CV<=1 STABLE**	**CV<=1 STABLE**	**NA**	**n<4 n<4**

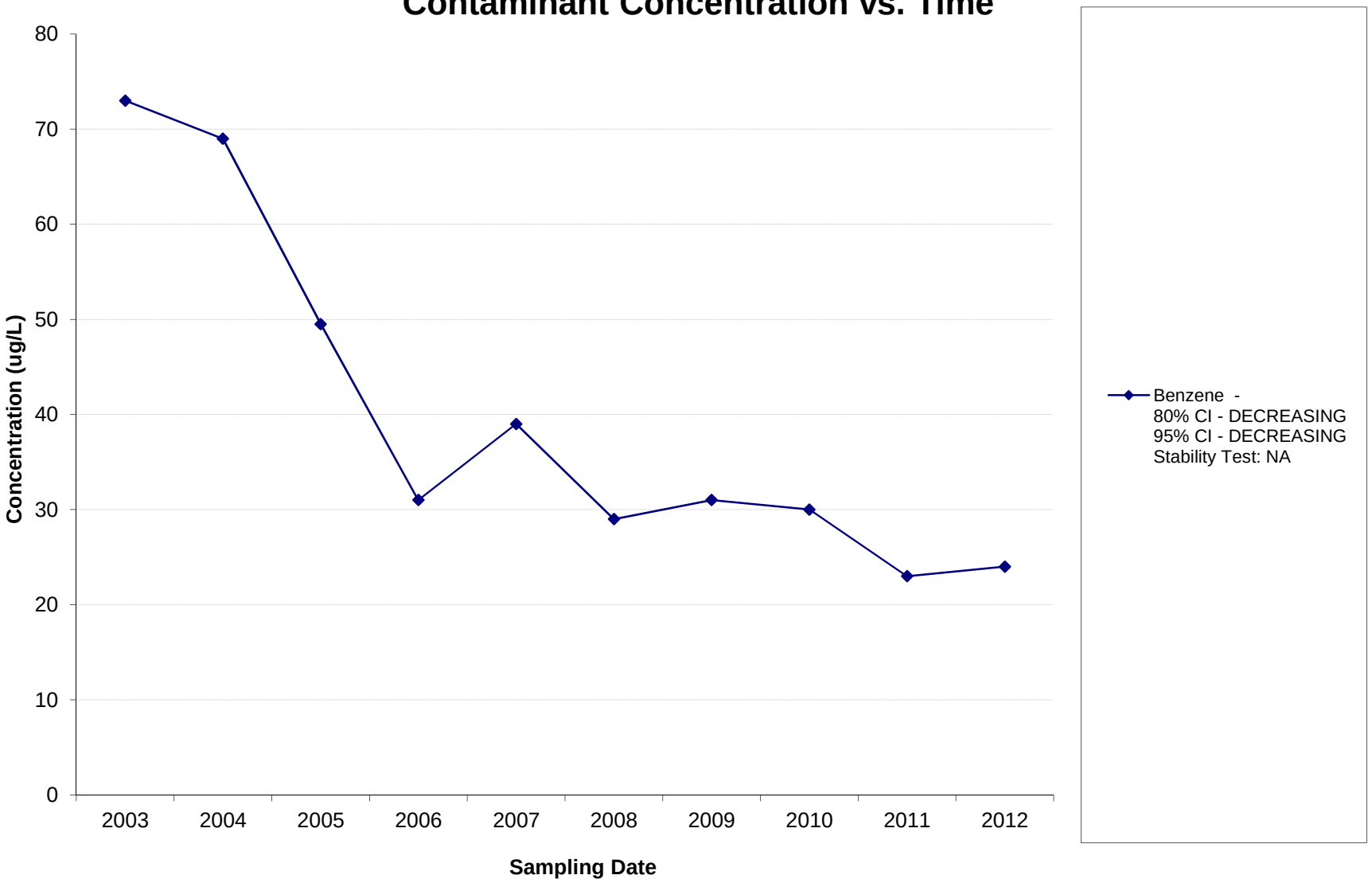
Data Entry By =	RB	Date =	11/30/2012	Checked By =	CA

SWMU 61, TFB-MW4B
Contaminant Concentration vs. Time




SWMU 61, TFB-MW4B
Contaminant Concentration vs. Time
Concentration (ug/L)
7000
6000
5000
4000
3000
2000
1000
0
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Sampling Date
Toluene -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE
Ethylbenzene -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

SWMU 61, TFB-MW4B
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	03-104

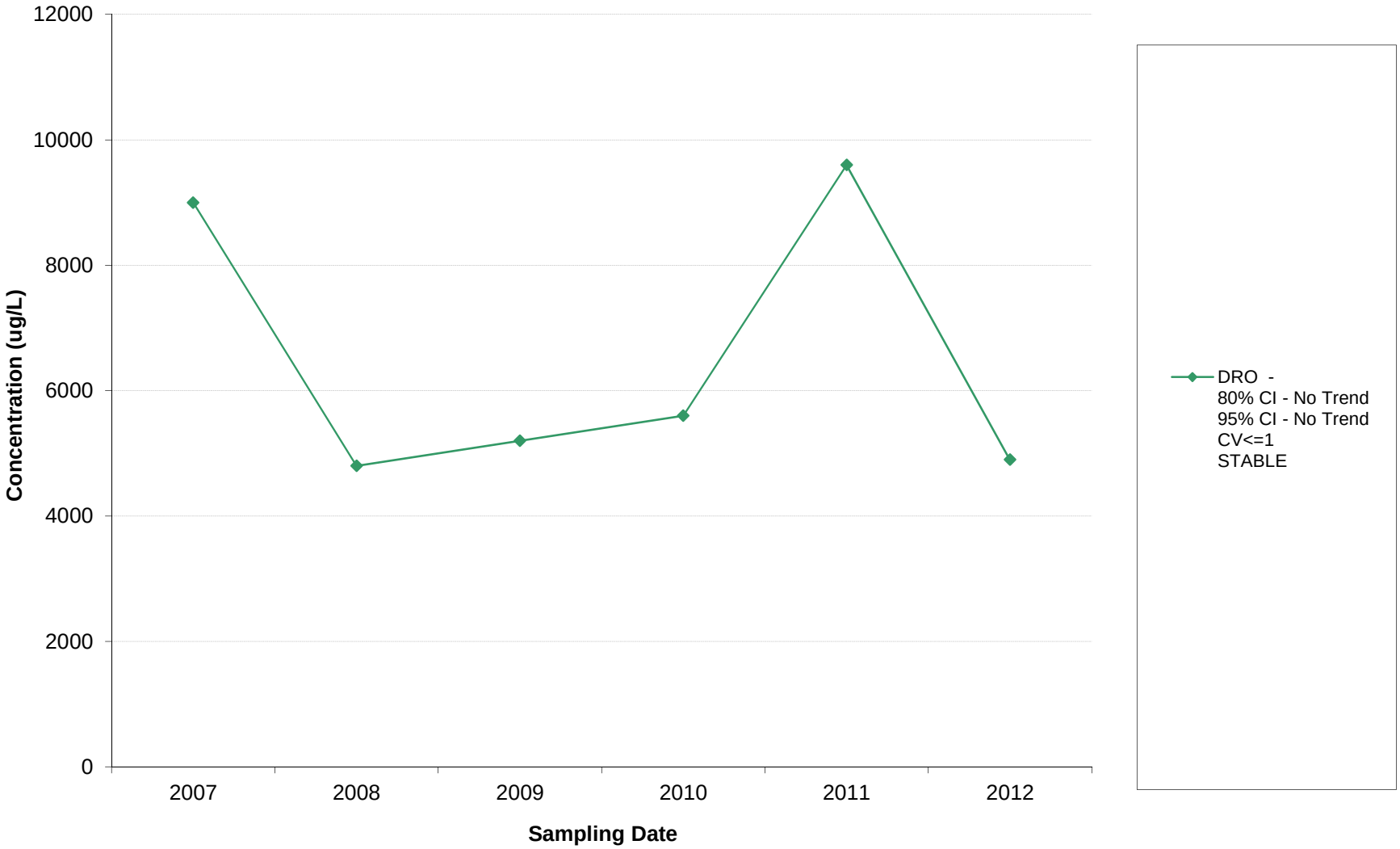
	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/07	**9000**					
2	10/01/08	**4800**					
3	10/01/09	**5200**					
4	10/01/10	**5600**					
5	10/01/11	**9600**					
6	09/01/12	**4900**					
7							
8							
9							
10							

Mann Kendall Statistic (S) =	1	0	0	0	0	0
Number of Rounds (n) =	6	0	0	0	0	0
Average =	6516.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2182.124	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.335	#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 =	RB	Date =	11/30/2012	Checked By =	CA

SWMU 62, 03-104
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

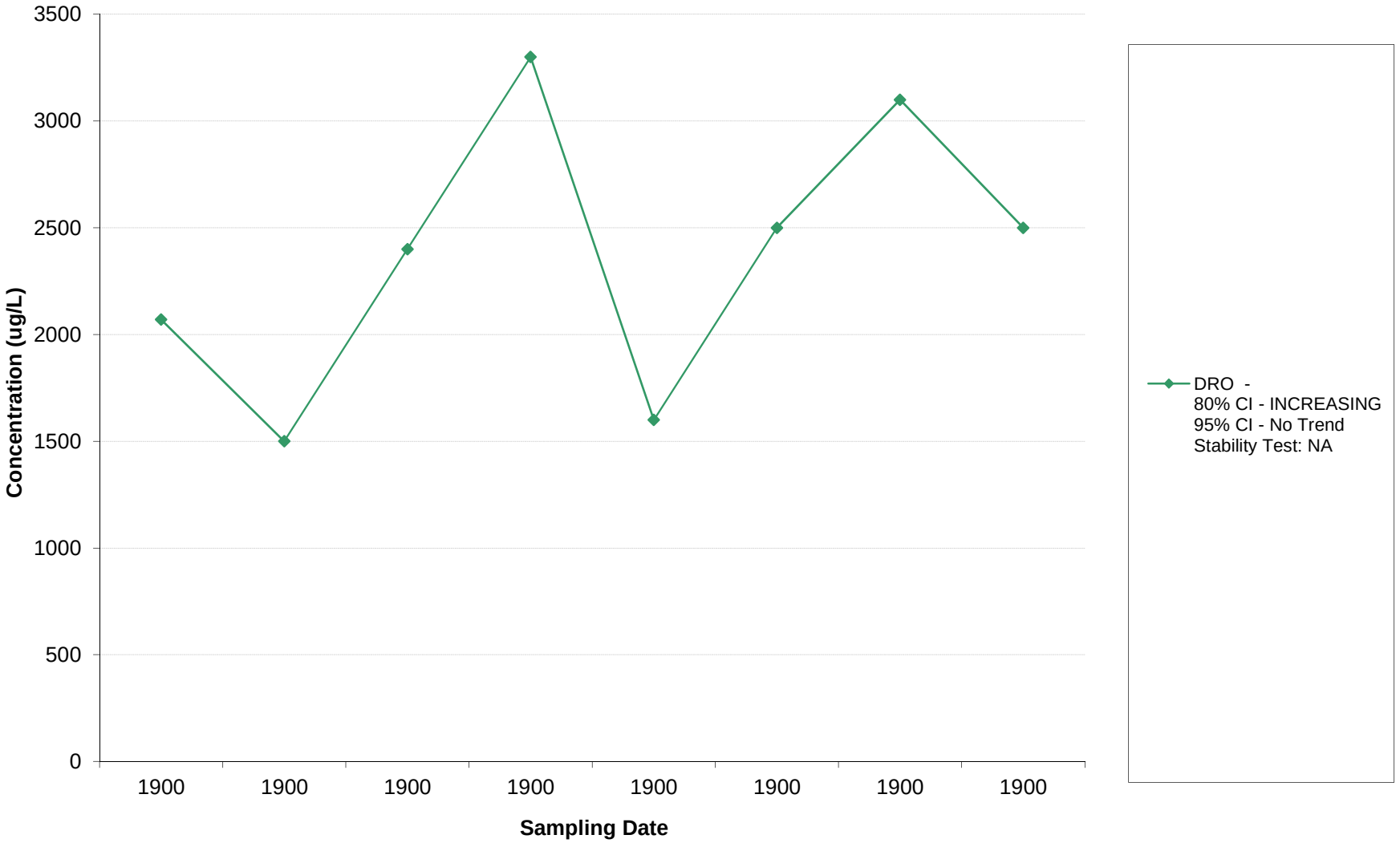
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	03-155

	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	**1660**					
2	10/01/05	**2070**					
3	10/01/06	**1500**					
4	10/01/07	**2400**					
5	10/01/08	**3300**					
6	10/01/09	**1600**					
7	10/01/10	**2500**					
8	10/01/11	**3100**					
9	09/01/12	**2500**					
10							

Mann Kendall Statistic (S) =	15	0	0	0	0	0
Number of Rounds (n) =	9	0	0	0	0	0
Average =	2292.22	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	644.395	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.281	#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		**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 =	RB	Date =	11/30/2012	Checked By =	CA

SWMU 62, 03-155
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	03-502

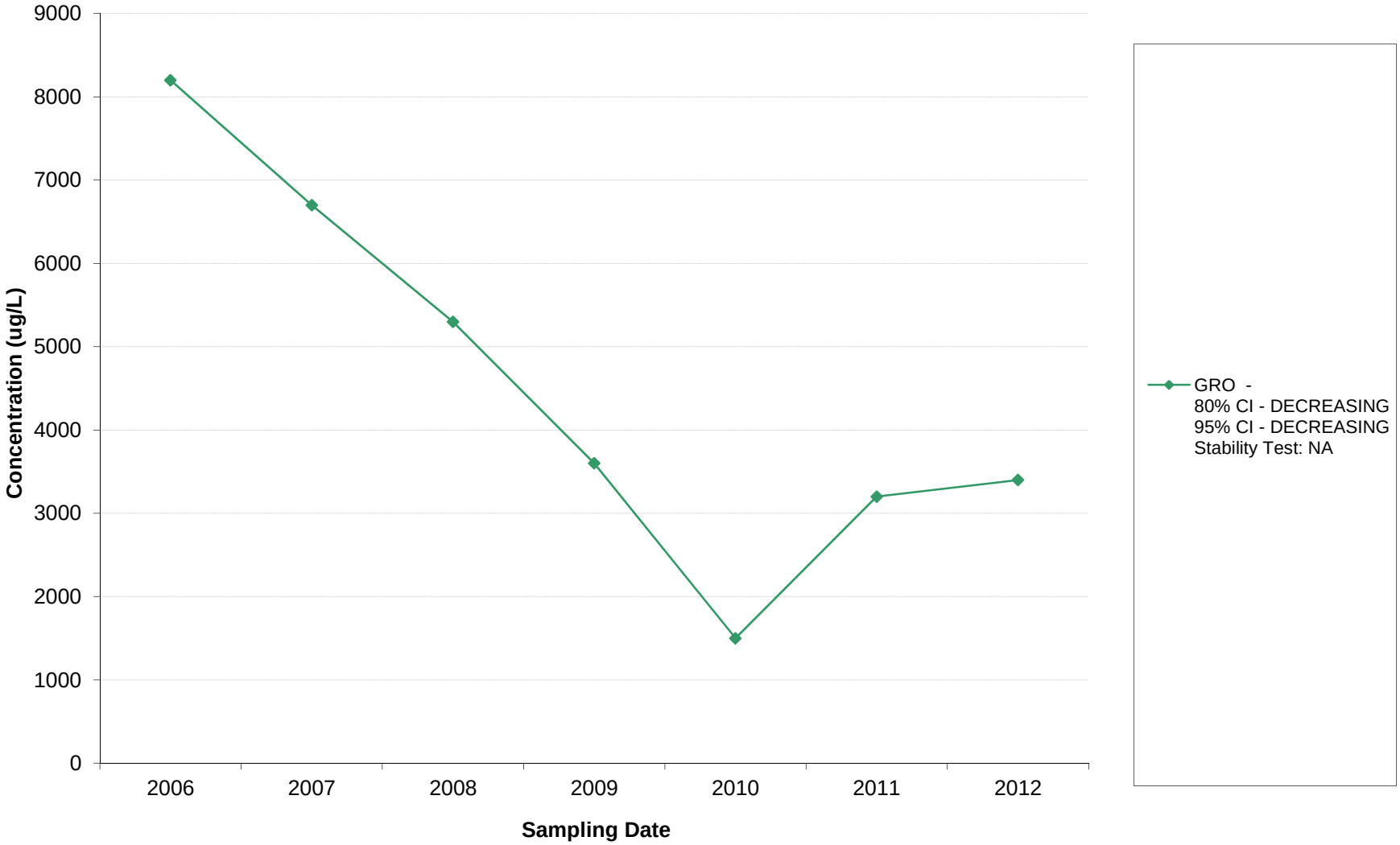
	Compound ->	GRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**8200**					
2	10/01/07	**6700**					
3	10/01/08	**5300**					
4	10/01/09	**3600**					
5	10/01/10	**1500**					
6	10/01/11	**3200**					
7	09/01/12	**3400**					
8							
9							
10							

Mann Kendall Statistic (S) =	-15	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	4557.14	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2304.240	#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**	**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		**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 =	RB	Date =	11/30/2012	Checked By =	CA

SWMU 62, 03-502
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

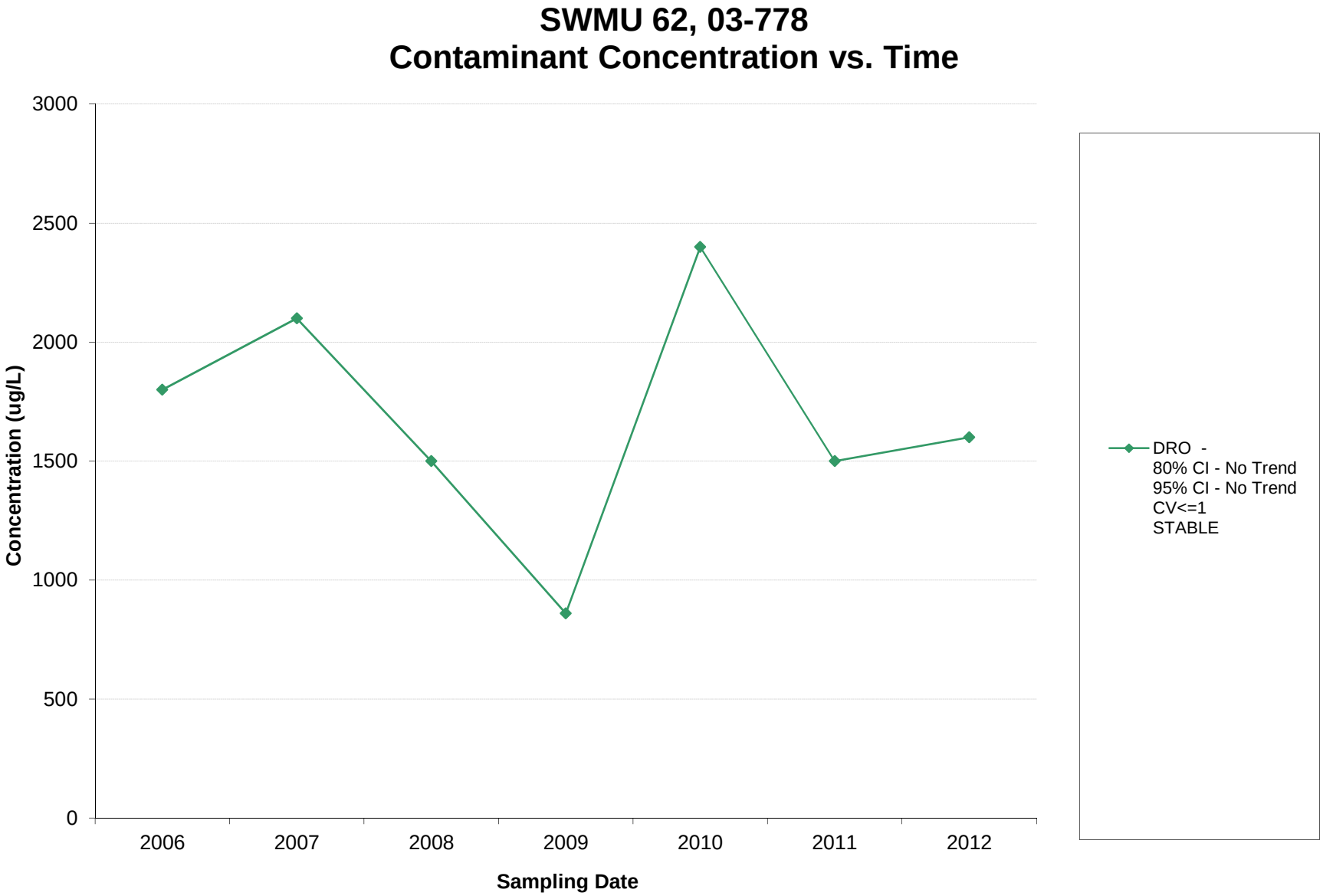
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	03-778

	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	**1800**					
2	10/01/07	**2100**					
3	10/01/08	**1500**					
4	10/01/09	**860**					
5	10/01/10	**2400**					
6	10/01/11	**1500**					
7	09/01/12	**1600**					
8							
9							
10							

Mann Kendall Statistic (S) =	-2	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	1680.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	492.070	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.293	#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 =	RB	Date =	11/30/2012	Checked By =	CA


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
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

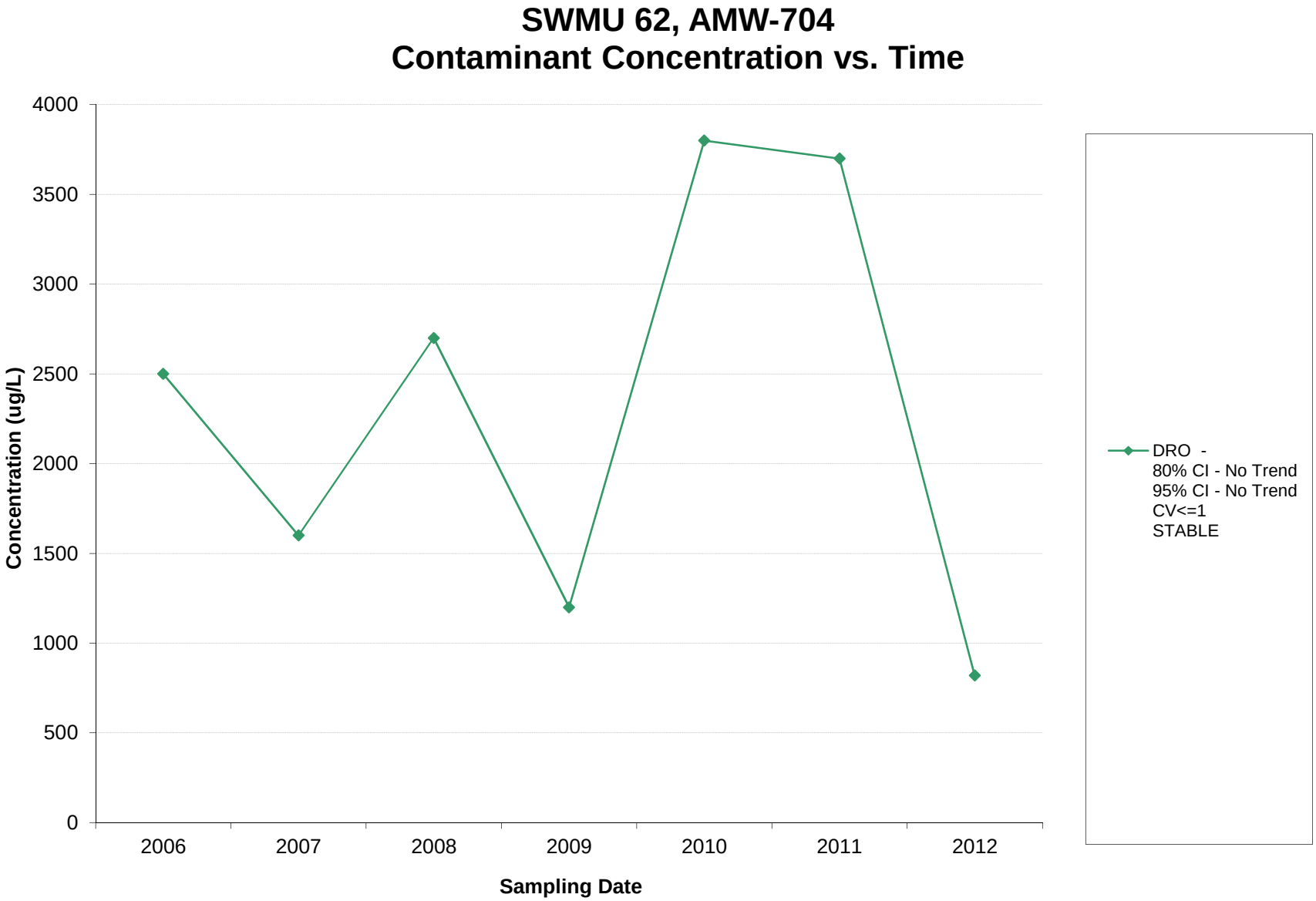
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	AMW-704

	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	09/01/12	**820**					
8							
9							
10							

Mann Kendall Statistic (S) =	-1	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	2331.43	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1175.690	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.504	#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 =	RB	Date =	11/30/2012	Checked By =	CA


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
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	MRP-MW2

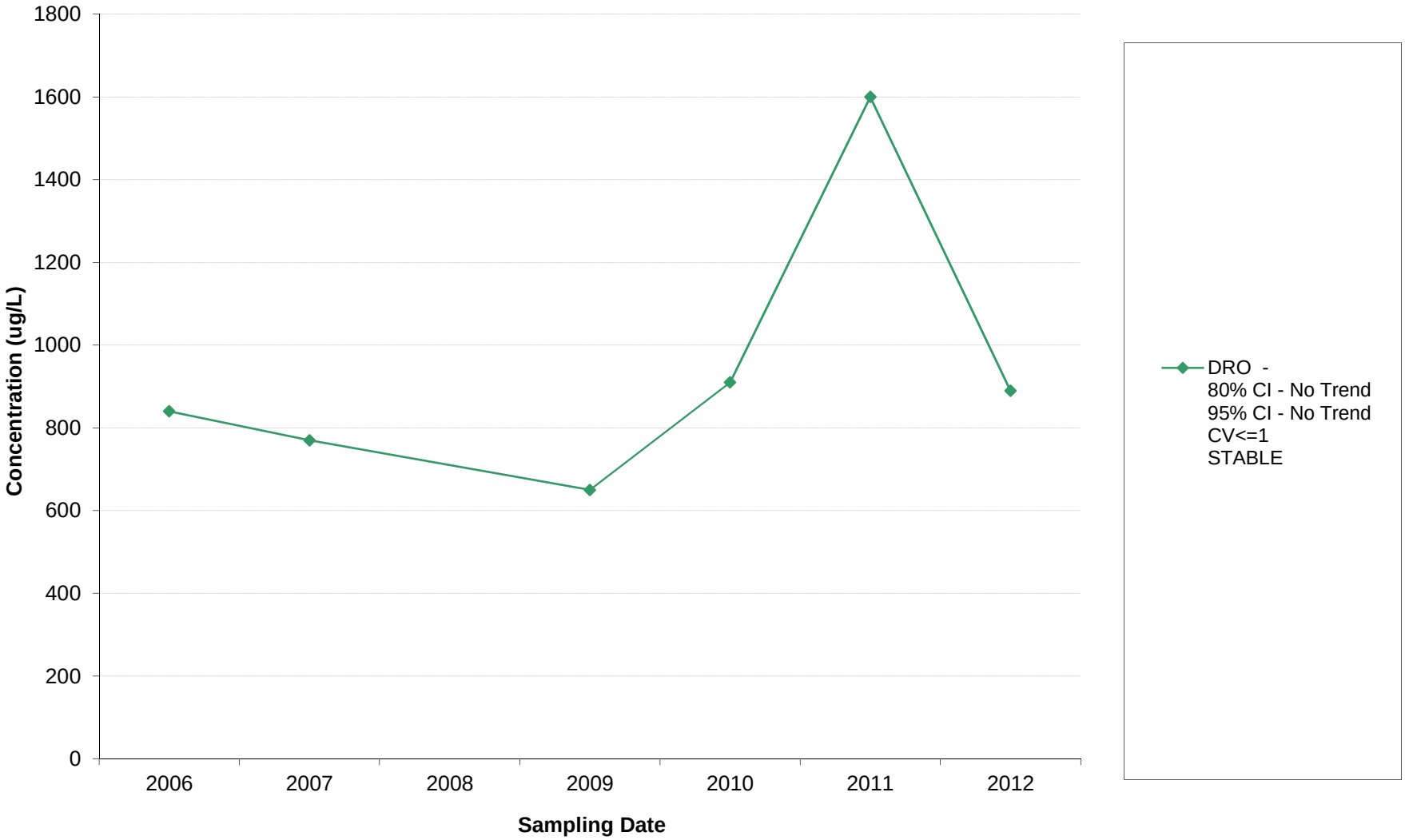
	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if 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	09/01/12	**890**					
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 =	943.33	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	335.241	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.355	#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 =	RB	Date =	12/10/2012	Checked By =	CA

SWMU 62, MRP-MW2
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	MRP-MW2

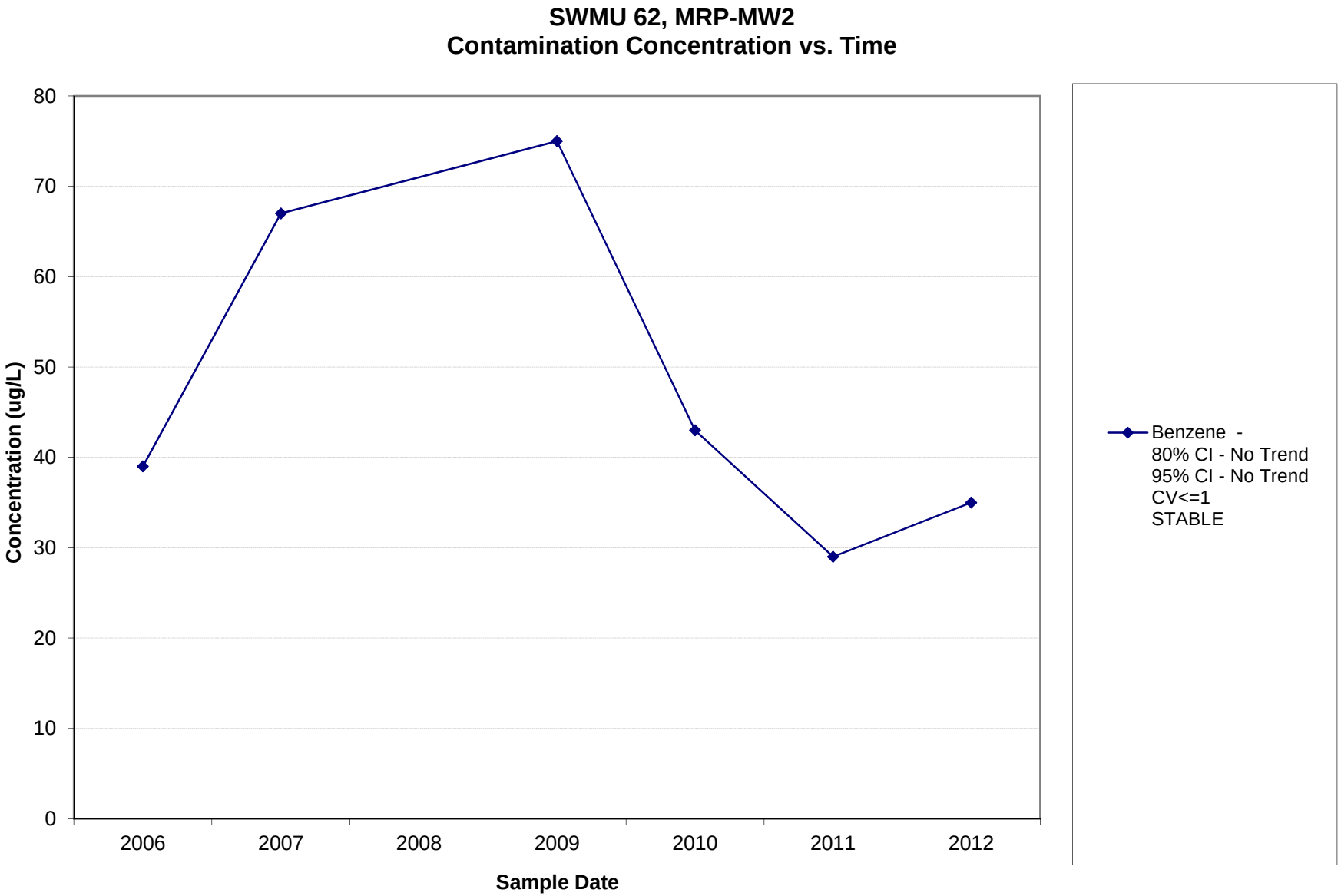
	Compound ->	Benzene	GRO				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**39**	**3100**				
2	10/01/07	**67**	**8400**				
3	10/01/09	**75**	**4700**				
4	10/01/10	**43**	**2300**				
5	10/01/11	**29**	**4800**				
6	09/01/12	**35**	**2900**				
7							
8							
9							
10							

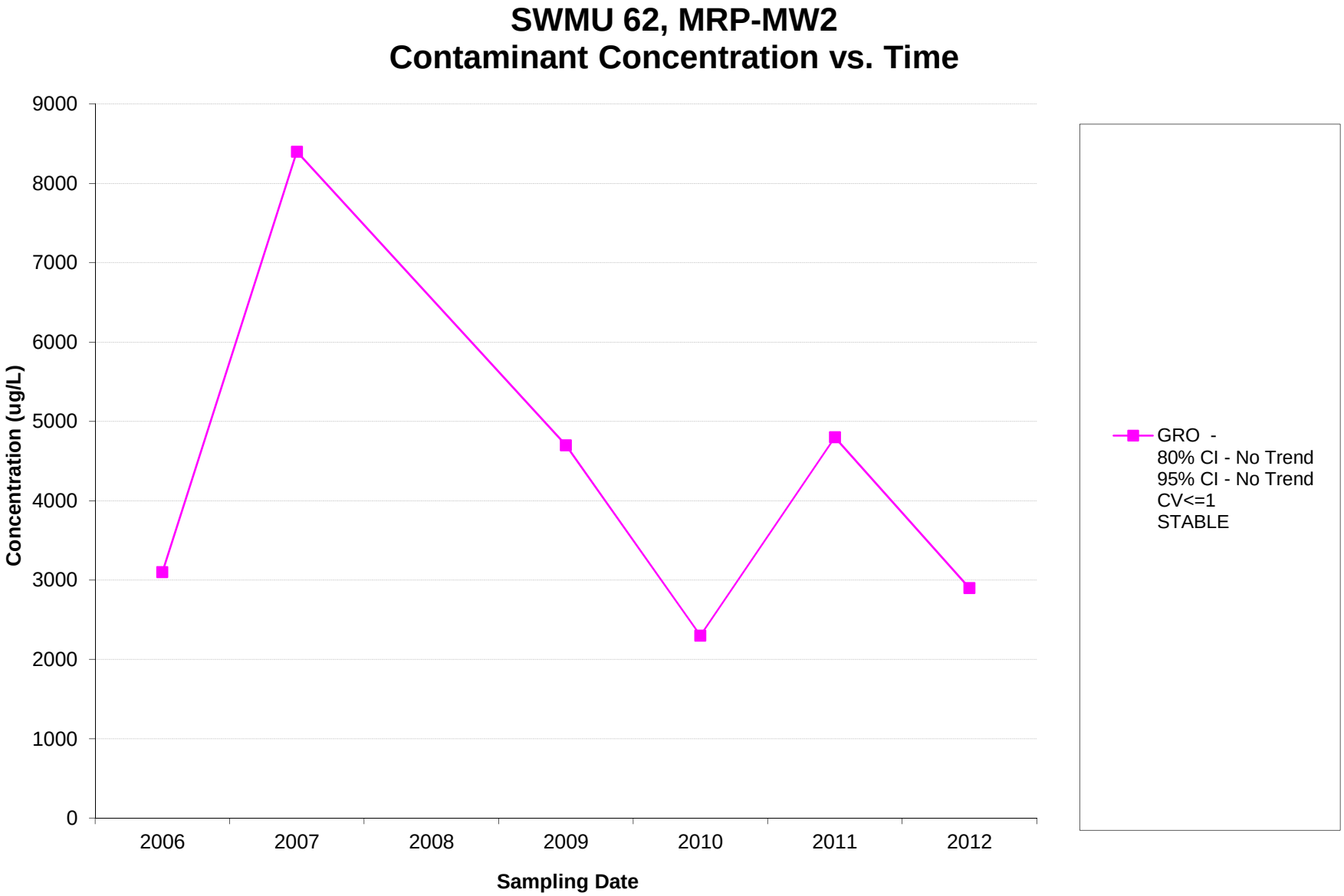
Mann Kendall Statistic (S) =	-5	-3	0	0	0	0
Number of Rounds (n) =	6	6	0	0	0	0
Average =	48.00	4366.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	18.580	2217.807	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.387	0.508	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

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 =	RB	Date =	12/10/2012	Checked By =	CA


SWMU 62, MRP-MW2
Contamination Concentration vs. Time
Concentration (ug/L)
80
70
60
50
40
30
20
10
0
2006
2007
2008
2009
2010
2011
2012
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
Sampling Date
GRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

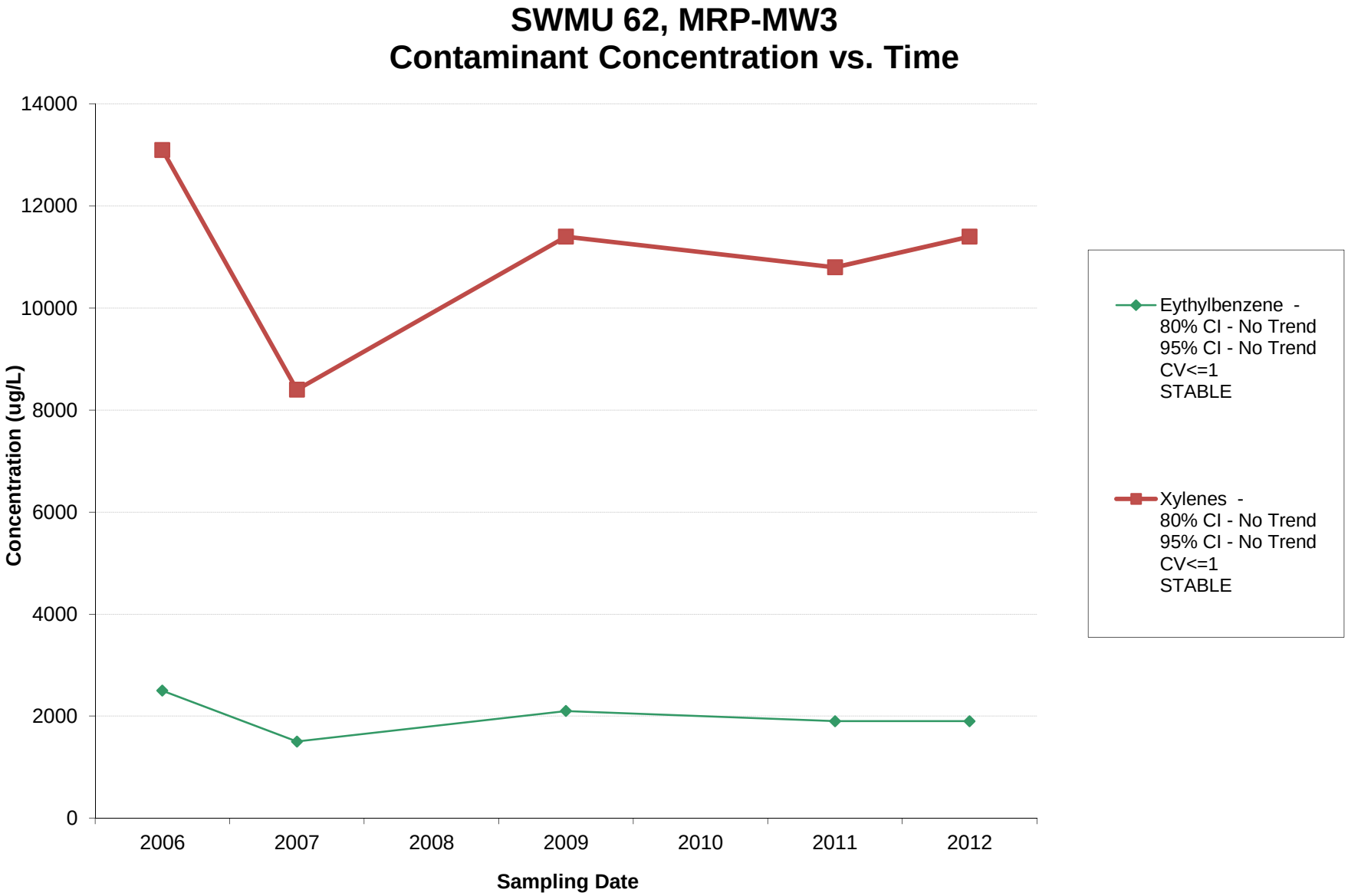
Mann-Kendall Statistical Test

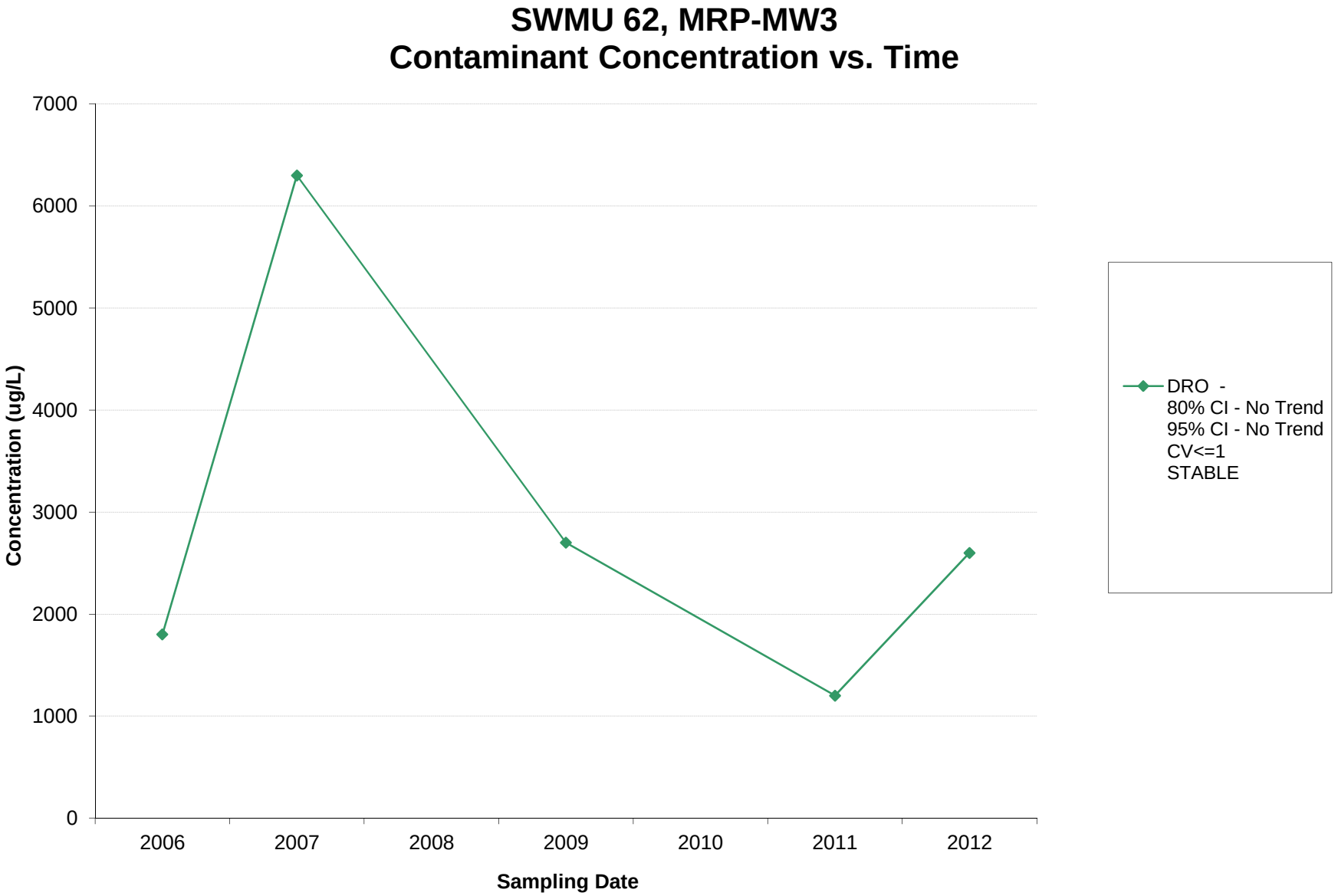
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	MRP-MW3

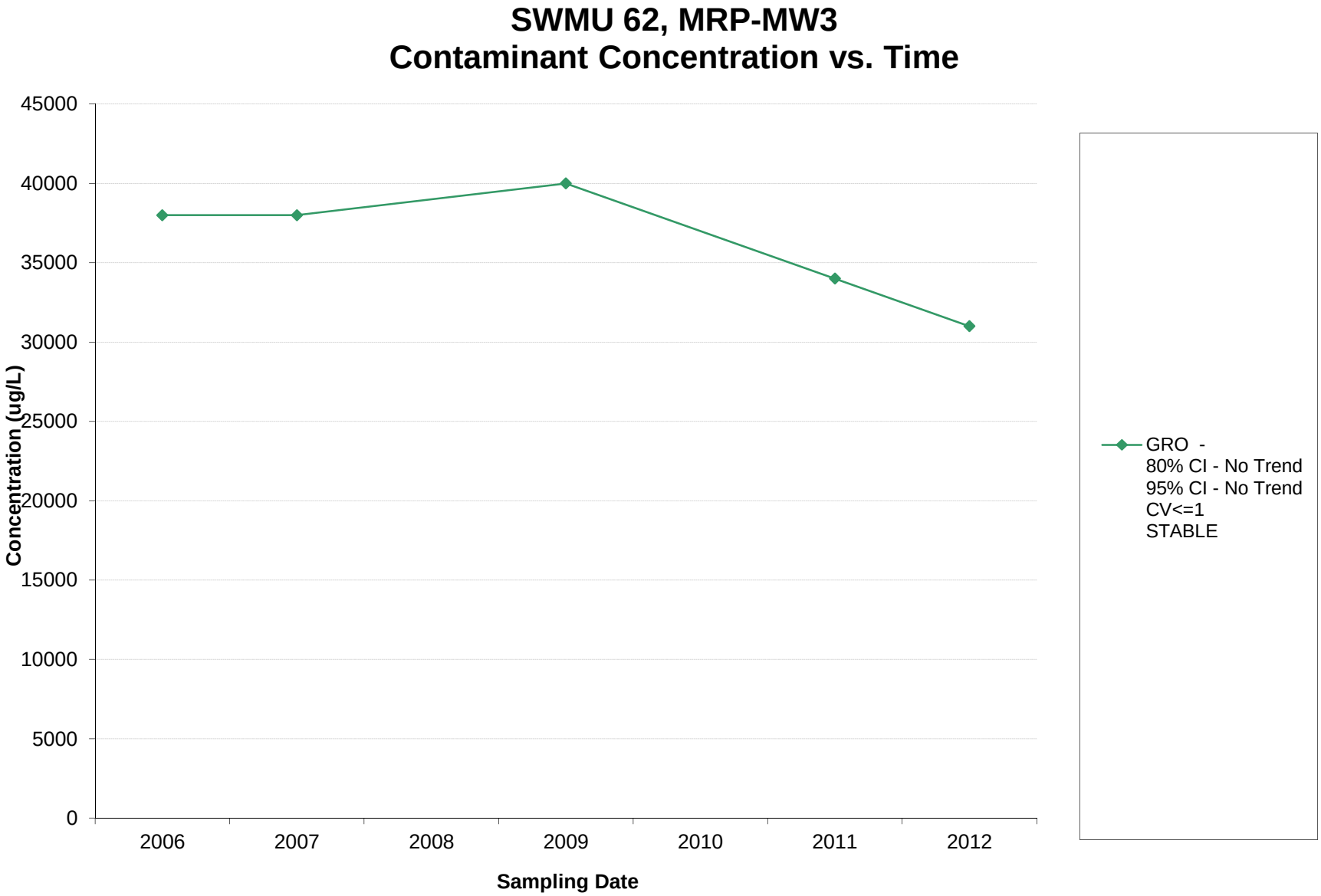
	Compound ->	GRO	Eythylbenzene	Xylenes	DRO		
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/06	**38000**	**2500**	**13100**	**1800**		
2	10/01/07	**38000**	**1500**	**8400**	**6300**		
3	10/01/09	**40000**	**2100**	**11400**	**2700**		
4	10/01/11	**34000**	**1900**	**10800**	**1200**		
5	09/01/12	**31000**	**1900**	**11400**	**2600**		
6							
7							
8							
9							
10							

	Mann Kendall Statistic (S) =	-5	-3	-1	-2	0	0
	Number of Rounds (n) =	5	5	5	5	0	0
	Average =	36200.00	1980.00	11020.00	2920.00	#DIV/0!	#DIV/0!
	Standard Deviation =	3633.180	363.318	1697.645	1986.706	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.100	0.183	0.154	0.680	#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 =	RB	Date =	12/10/2012	Checked By =	CA


SWMU 62, MRP-MW3
Contaminant Concentration vs. Time
14000
12000
10000
8000
6000
4000
2000
0
Concentration (ug/L)
2006
2007
2008
2009
2010
2011
2012
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
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE


SWMU 62, MRP-MW3
Contaminant Concentration vs. Time
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
Concentration (ug/L)
2006
2007
2008
2009
2010
2011
2012
Sampling Date
GRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

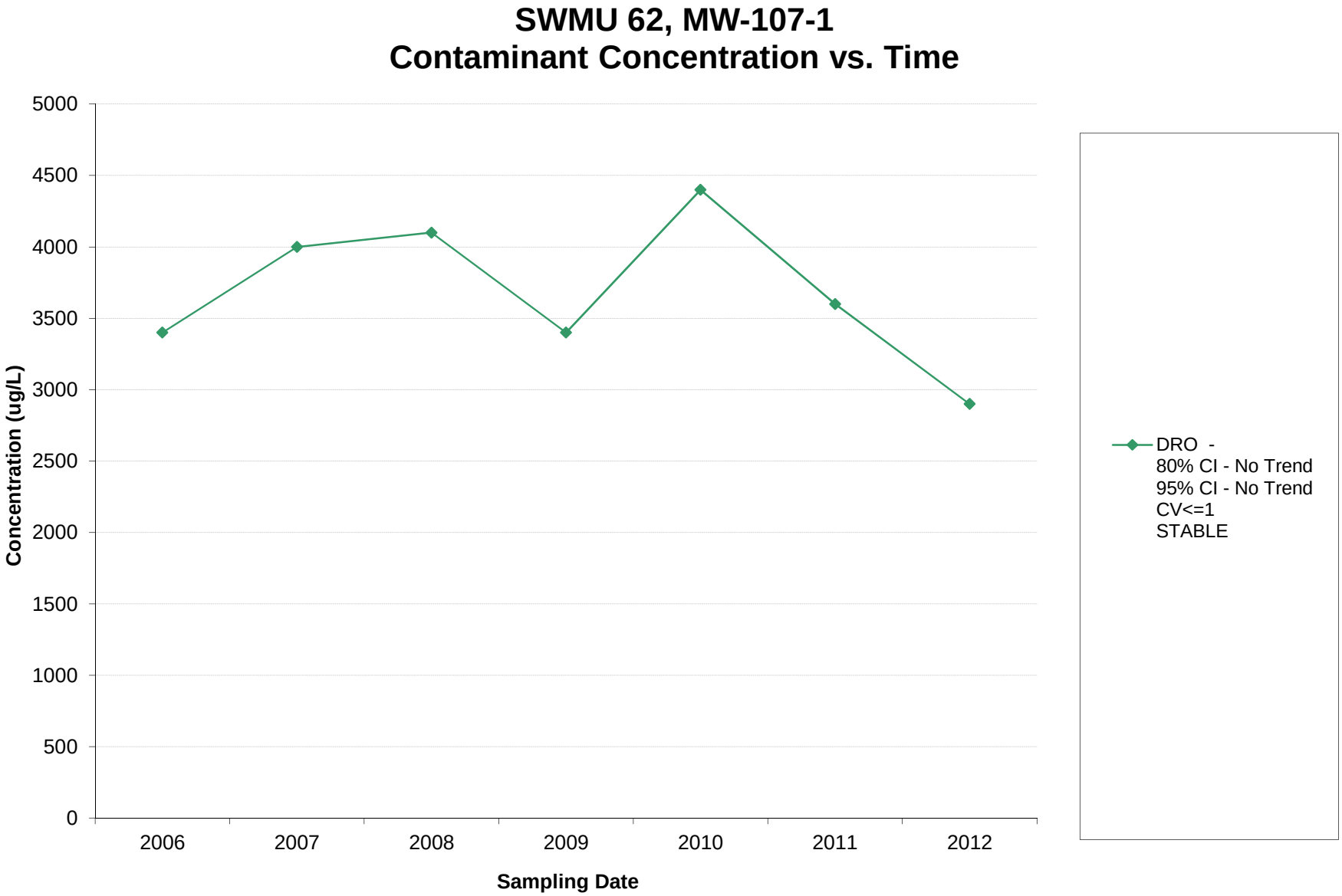
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	MW-107-1

	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	**3400**					
2	10/01/07	**4000**					
3	10/01/08	**4100**					
4	10/01/09	**3400**					
5	10/01/10	**4400**					
6	10/01/11	**3600**					
7	09/01/12	**2900**					
8							
9							
10							

Mann Kendall Statistic (S) =	-2	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	3685.71	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	511.301	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.139	#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 =	RB	Date =	12/10/2012	Checked By =	CA

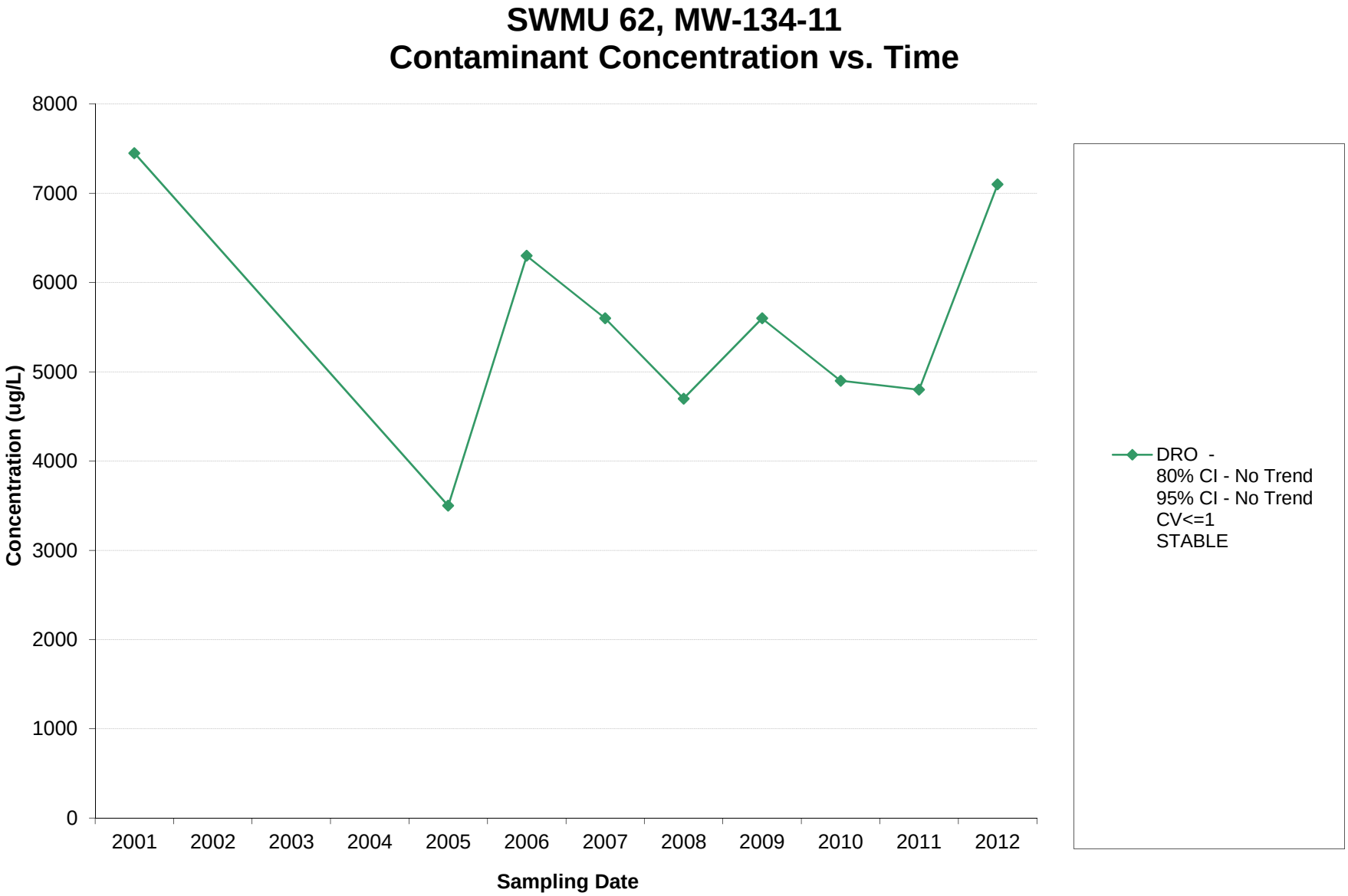

SWMU 62, MW-107-1
Contaminant Concentration vs. Time
Concentration (ug/L)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2006
2007
2008
2009
2010
2011
2012
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	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	**7450**					
2	10/01/05	**3500**					
3	10/01/06	**6300**					
4	10/01/07	**5600**					
5	10/01/08	**4700**					
6	10/01/09	**5600**					
7	10/01/10	**4900**					
8	10/01/11	**4800**					
9	09/01/12	**7100**					
10							
	Mann Kendall Statistic (S) =	-3	0	0	0	0	0
	Number of Rounds (n) =	9	0	0	0	0	0
	Average =	5550.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Standard Deviation =	1249.500	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.225	#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 =	RB	Date =	12/10/2012	Checked By =	CA

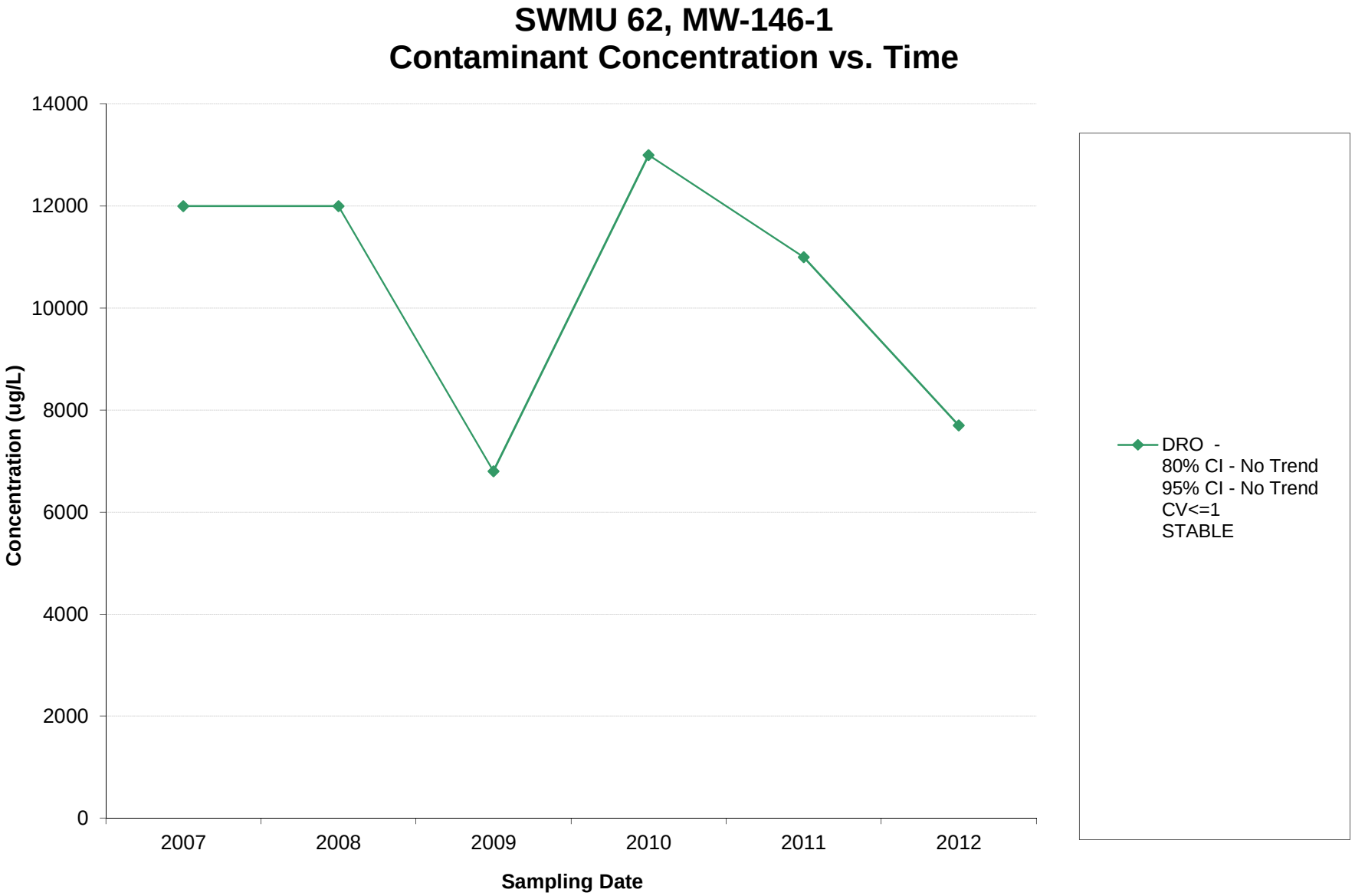

SWMU 62, MW-134-11
Contaminant Concentration vs. Time
Concentration (ug/L)
8000
7000
6000
5000
4000
3000
2000
1000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	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	**12000**					
2	10/01/08	**12000**					
3	10/01/09	**6800**					
4	10/01/10	**13000**					
5	10/01/11	**11000**					
6	09/01/12	**7700**					
7							
8							
9							
10							
	Mann Kendall Statistic (S) =	-4	0	0	0	0	0
	Number of Rounds (n) =	6	0	0	0	0	0
	Average =	10416.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Standard Deviation =	2549.052	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Coefficient of Variation(CV)=	0.245	#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 =	RB	Date =	12/10/2012	Checked By =	CA


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
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

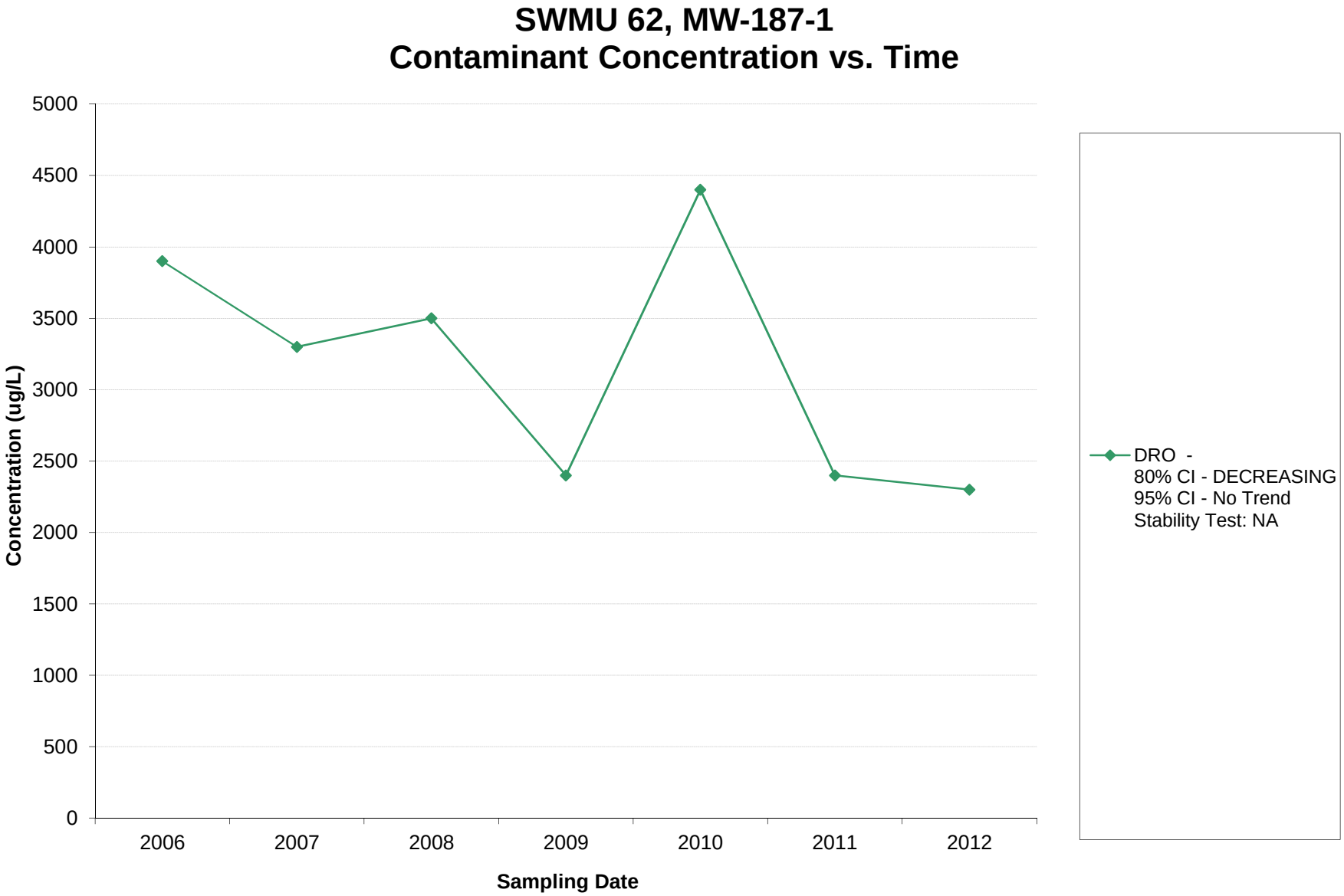
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	MW-187-1

	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	**3900**					
2	10/01/07	**3300**					
3	10/01/08	**3500**					
4	10/01/09	**2400**					
5	10/01/10	**4400**					
6	10/01/11	**2400**					
7	09/01/12	**2300**					
8							
9							
10							

Mann Kendall Statistic (S) =	-10	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	3171.43	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	828.079	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.261	#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 =	RB	Date =	12/10/2012	Checked By =	CA


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
Sampling Date
DRO -
80% CI - DECREASING
95% CI - No Trend
Stability Test: NA

Mann-Kendall Statistical Test

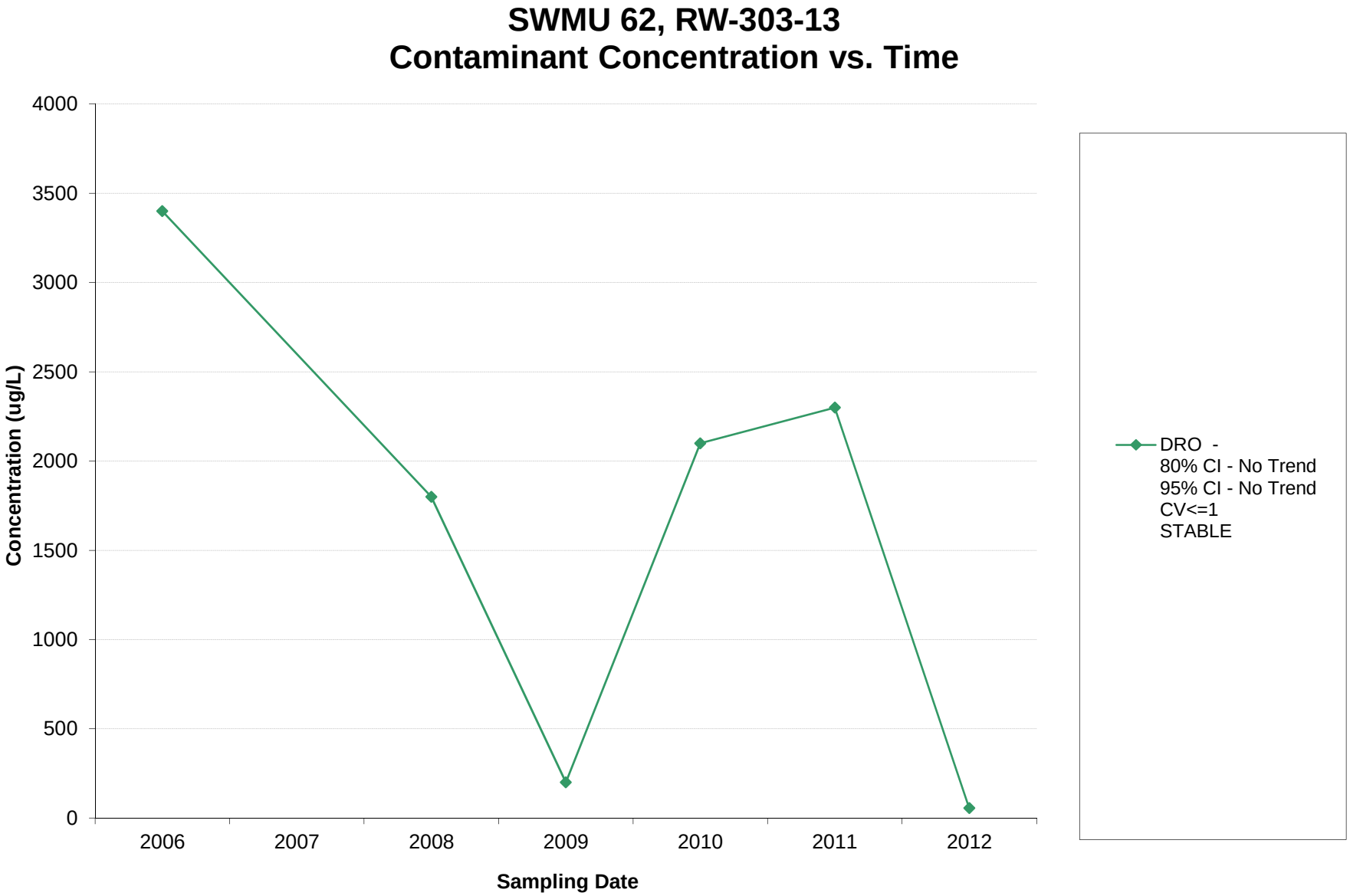
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	RW-303-13

	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	09/01/12	**56**					
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 =	1642.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1292.518	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.787	#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 =	RB	Date =	11/30/2012	Checked By =	CA


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
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

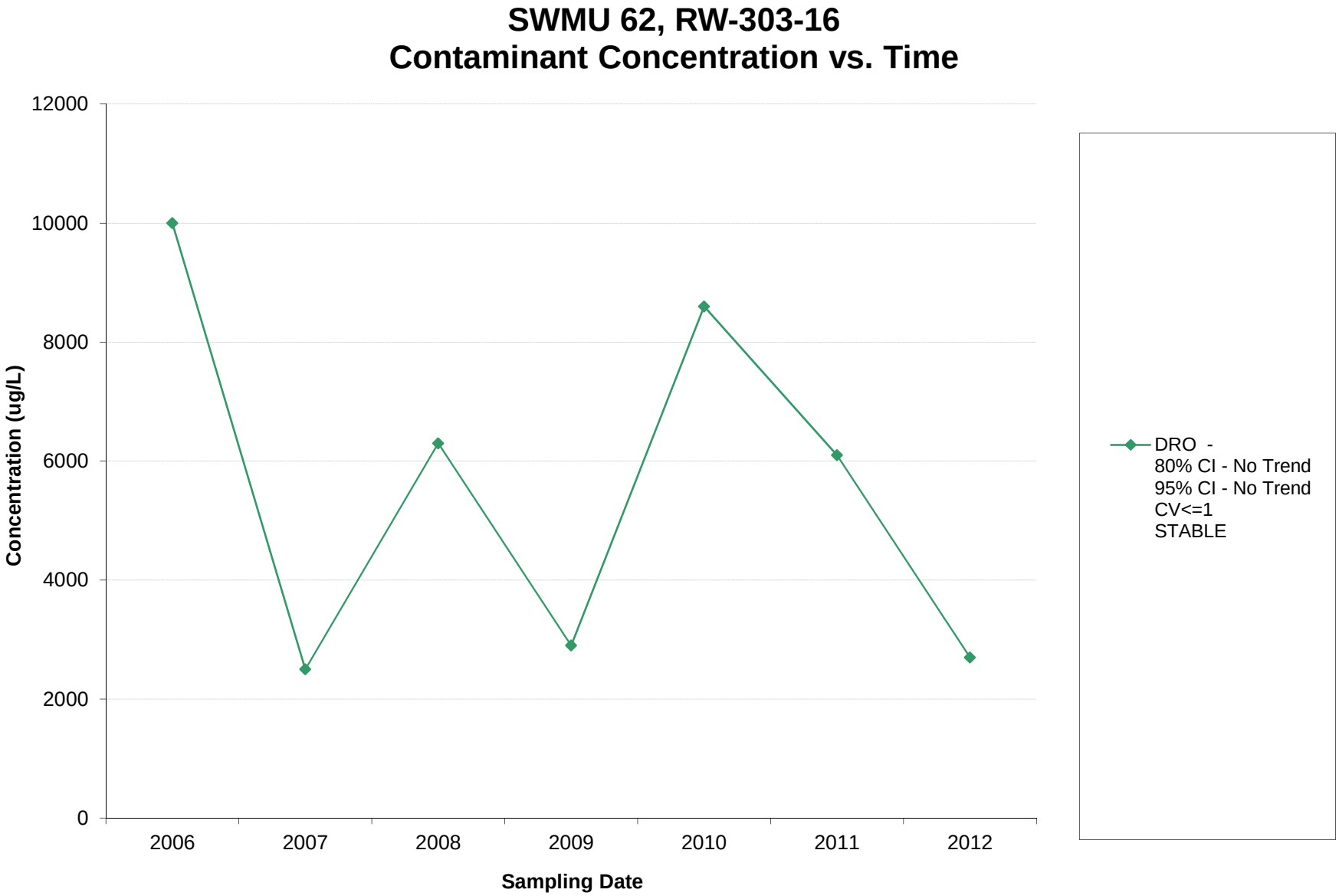
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	SWMU 62	Well Number =	RW-303-16

	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	**10000**					
2	10/01/07	**2500**					
3	10/01/08	**6300**					
4	10/01/09	**2900**					
5	10/01/10	**8600**					
6	10/01/11	**6100**					
7	09/01/12	**2700**					
8							
9							
10							

Mann Kendall Statistic (S) =	-5	0	0	0	0	0
Number of Rounds (n) =	7	0	0	0	0	0
Average =	5585.71	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	3011.328	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.539	#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 =	RB	Date =	12/10/2012	Checked By =	CA


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
Sampling Date
DRO -
80% CI - No Trend
95% CI - No Trend
CV<=1
STABLE

Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	TANKER SHED	Well Number =	04-175

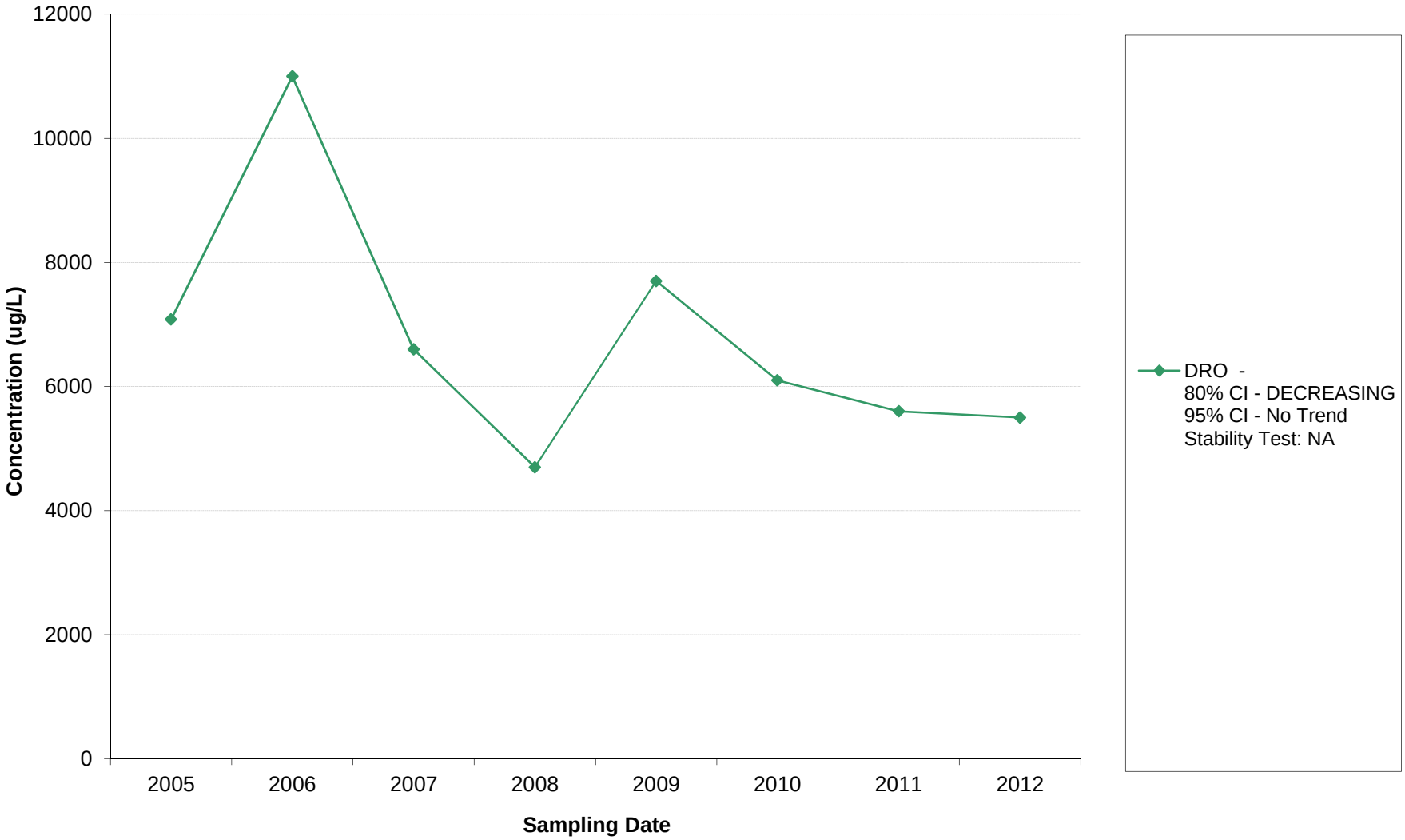
	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/05	**7080**					
2	10/01/06	**11000**					
3	10/01/07	**6600**					
4	10/01/08	**4700**					
5	10/01/09	**7700**					
6	10/01/10	**6100**					
7	10/01/11	**5600**					
8	08/01/12	**5500**					
9							
10							

Mann Kendall Statistic (S) =	-14	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	6785.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1949.234	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.287	#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 =	RB	Date =	12/10/2012	Checked By =	CA

Tanker Shed, 04-175
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

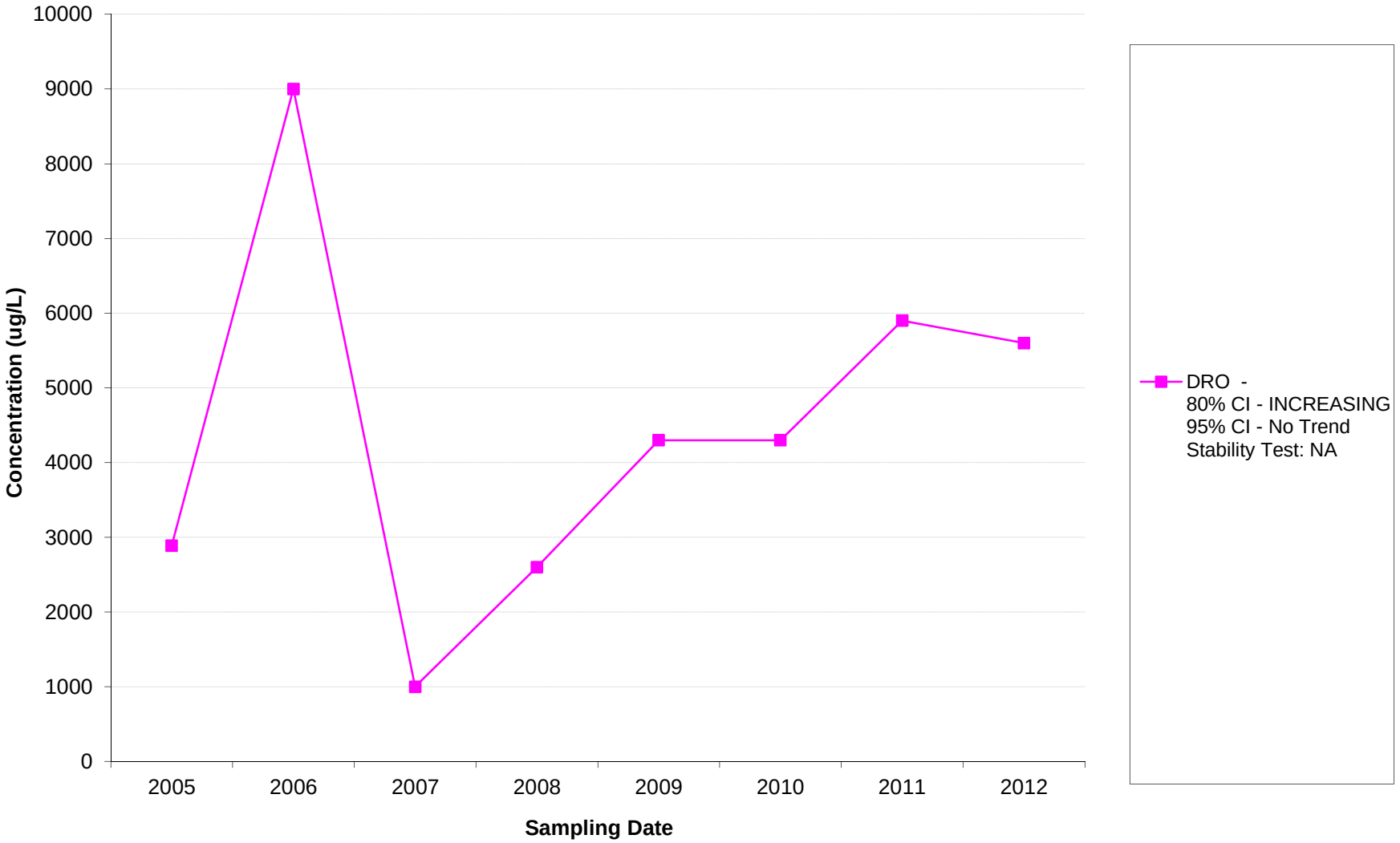
Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	Tanker Shed	Well Number =	04-290

	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	**2890**					
2	10/01/06	**9000**					
3	10/01/07	**1000**					
4	10/01/08	**2600**					
5	10/01/09	**4300**					
6	10/01/10	**4300**					
7	10/01/11	**5900**					
8	08/01/12	**5600**					
9							
10							

Mann Kendall Statistic (S) =	9	0	0	0	0	0
Number of Rounds (n) =	8	0	0	0	0	0
Average =	4448.75	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	2447.479	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.550	#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		**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 =	RB	Date =	12/10/2012	Checked By =	CA

Tanker Shed, 04-290
Contaminant Concentration vs. Time



Mann-Kendall Statistical Test

Site Name =	2012 Adak Long Term Monitoring TO 55	Site ID No. =	Tanker Shed	Well Number =	04-306

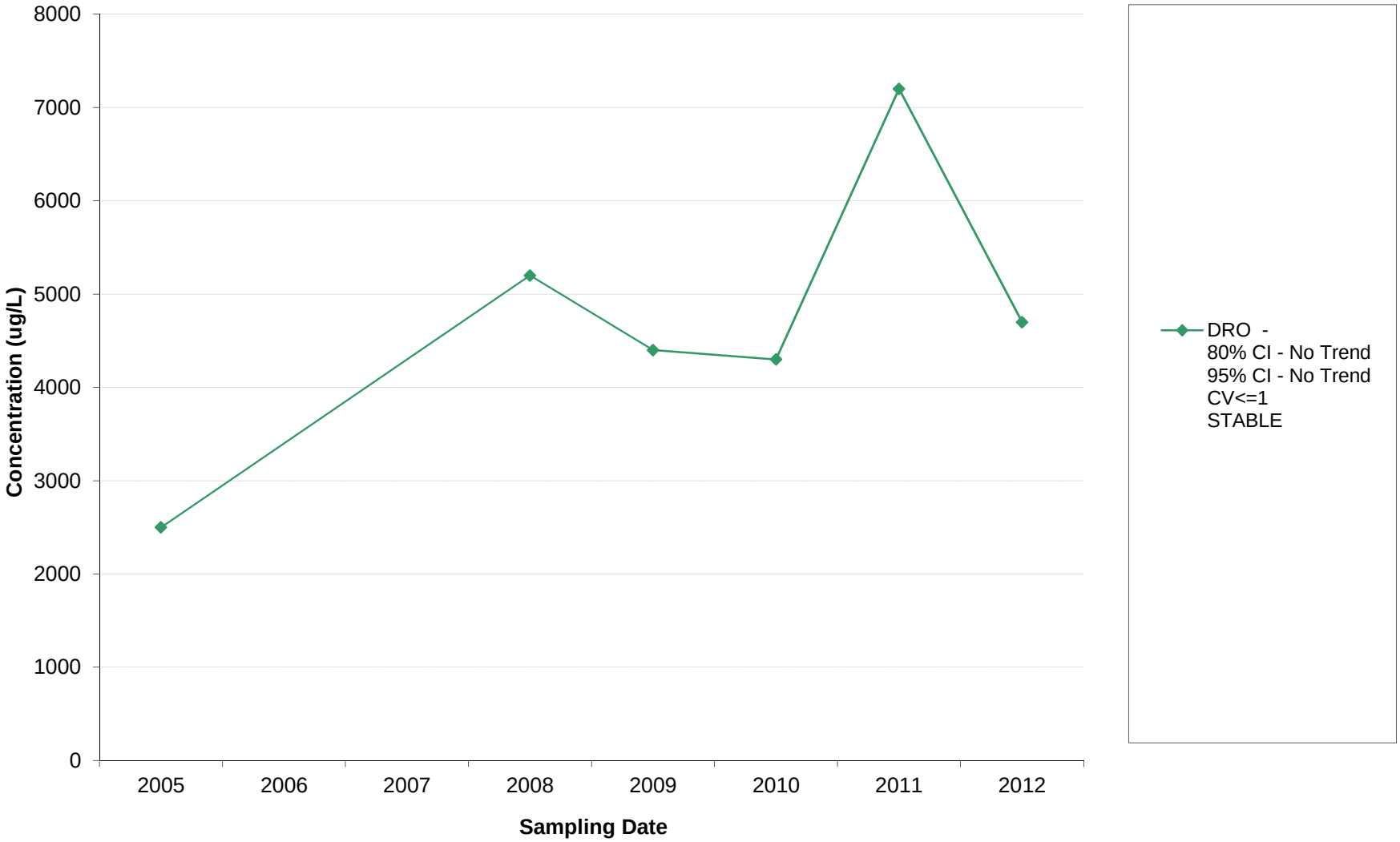
	Compound ->	DRO					
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data - 0 if ND)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	10/01/05	**2500**					
2	10/01/08	**5200**					
3	10/01/09	**4400**					
4	10/01/10	**4300**					
5	10/01/11	**7200**					
6	08/01/12	**4700**					
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 =	4716.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =	1522.388	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=	0.323	#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 =	RB	Date =	12/10/2012	Checked By =	CA

Tanker Shed, 04-306
Contaminant Concentration vs. Time



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 (9/1/2012)	34 (10/1/2003)	(6.9 - 34)/(10 - 1)	-3.01111
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 (9/1/2012)	30.8 J (10/1/2004)	(6.9 - 30.8)/(10 - 2)	-2.9875
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 (9/1/2012)	22.7 J (10/1/2005)	(6.9 - 22.7)/(10 - 3)	-2.25714
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 (9/1/2012)	16 (10/1/2006)	(6.9 - 16)/(10 - 4)	-1.51667
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 (9/1/2012)	14 (10/1/2007)	(6.9 - 14)/(10 - 5)	-1.42
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 (9/1/2012)	9.6 D (10/1/2008)	(6.9 - 9.6)/(10 - 6)	-0.675
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 (9/1/2012)	13 D (10/1/2009)	(6.9 - 13)/(10 - 7)	-2.03333

8.3 (10/1/2011)	12 (10/1/2010)	(8.3 - 12)/(9 - 8)	-3.7
6.9 J (9/1/2012)	12 (10/1/2010)	(6.9 - 12)/(10 - 8)	-2.55
6.9 J (9/1/2012)	8.3 (10/1/2011)	(6.9 - 8.3)/(10 - 9)	-1.4

Number of Q values = 45

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	-2.55
25	-2.425
26	-2.4
27	-2.35
28	-2.25714
29	-2.14
30	-2.03333
31	-2
32	-1.54
33	-1.51667
34	-1.425
35	-1.42
36	-1.4
37	-1
38	-1
39	-1
40	-0.675
41	-0.666667
42	-0.5
43	-0.433333
44	1.2
45	3.4

Sen's Estimator (Median Q) is -2.9875

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
9/1/2012	1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0
a = 2250
b = 6480
c = 180
Group Variance = 125
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 14.3282
M1 = (45 - 14.3282)/2.0 = 15.3359
M2 = (45 + 14.3282)/2.0 + 1 = 30.6641
Lower limit is -3.5 = Q(15)
Upper limit is -2 = Q(31)
-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 (9/1/2012)	22 (10/1/2000)	(9.6 - 22)/(12 - 1)	-1.12727
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 (9/1/2012)	17.8 (10/1/2001)	(9.6 - 17.8)/(12 - 2)	-0.82
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 (9/1/2012)	18 (10/1/2002)	(9.6 - 18)/(12 - 3)	-0.933333
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 (9/1/2012)	24 (10/1/2003)	(9.6 - 24)/(12 - 4)	-1.8
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 (9/1/2012)	16 (10/1/2004)	(9.6 - 16)/(12 - 5)	-0.914286
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 (9/1/2012)	14.6 (10/1/2005)	(9.6 - 14.6)/(12 - 6)	-0.833333
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 (9/1/2012)	13 J (10/1/2006)	(9.6 - 13)/(12 - 7)	-0.68
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 (9/1/2012)	14 (10/1/2007)	(9.6 - 14)/(12 - 8)	-1.1
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 (9/1/2012)	16 (10/1/2008)	(9.6 - 16)/(12 - 9)	-2.13333
12 (10/1/2010)	12 (10/1/2009)	(12 - 12)/(11 - 10)	0
9.6 (9/1/2012)	12 (10/1/2009)	(9.6 - 12)/(12 - 10)	-1.2
9.6 (9/1/2012)	12 (10/1/2010)	(9.6 - 12)/(12 - 11)	-2.4

Number of Q values = 66

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	-1.6
15	-1.6
16	-1.5
17	-1.5
18	-1.5
19	-1.48
20	-1.4
21	-1.25
22	-1.2
23	-1.14286

24	-1.13333
25	-1.12727
26	-1.11111
27	-1.1
28	-1
29	-1
30	-1
31	-0.96
32	-0.933333
33	-0.914286
34	-0.857143
35	-0.833333
36	-0.82
37	-0.8
38	-0.8
39	-0.8
40	-0.75
41	-0.75
42	-0.725
43	-0.68
44	-0.666667
45	-0.666667
46	-0.666667
47	-0.65
48	-0.644444
49	-0.633333
50	-0.6
51	-0.52
52	-0.333333
53	-0.333333
54	-0.3
55	-0.257143
56	-0.25
57	0
58	0
59	0.2
60	0.466667
61	0.666667
62	1
63	1.5
64	2
65	3.1
66	6

Sen's Estimator (Median Q) is -0.885714

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
9/1/2012	1

There are 0 time periods with multiple data

A = 36
B = 0
C = 0
D = 0
E = 4
F = 0
a = 3828
b = 11880
c = 264
Group Variance = 210.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 18.6009
M1 = (66 - 18.6009)/2.0 = 23.6996
M2 = (66 + 18.6009)/2.0 + 1 = 43.3004
Lower limit is -1.13333 = Q(24)
Upper limit is -0.68 = Q(43)
-0.68 < 0 indicating a downward trend in data.

Sen's Slope Analysis

Parameter: Benzene

Location: MW-E006

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
10.5 (10/1/2004)	19 (10/1/2003)	(10.5 - 19)/(2 - 1)	-8.5
7.82 (10/1/2005)	19 (10/1/2003)	(7.82 - 19)/(3 - 1)	-5.59
15 (10/1/2006)	19 (10/1/2003)	(15 - 19)/(4 - 1)	-1.33333
4.8 (10/1/2007)	19 (10/1/2003)	(4.8 - 19)/(5 - 1)	-3.55
16 (10/1/2008)	19 (10/1/2003)	(16 - 19)/(6 - 1)	-0.6
9.9 (10/1/2009)	19 (10/1/2003)	(9.9 - 19)/(7 - 1)	-1.51667
8.1 (10/1/2010)	19 (10/1/2003)	(8.1 - 19)/(8 - 1)	-1.55714
7.4 (10/1/2011)	19 (10/1/2003)	(7.4 - 19)/(9 - 1)	-1.45
4.7 (9/1/2012)	19 (10/1/2003)	(4.7 - 19)/(10 - 1)	-1.58889
7.82 (10/1/2005)	10.5 (10/1/2004)	(7.82 - 10.5)/(3 - 2)	-2.68
15 (10/1/2006)	10.5 (10/1/2004)	(15 - 10.5)/(4 - 2)	2.25
4.8 (10/1/2007)	10.5 (10/1/2004)	(4.8 - 10.5)/(5 - 2)	-1.9
16 (10/1/2008)	10.5 (10/1/2004)	(16 - 10.5)/(6 - 2)	1.375
9.9 (10/1/2009)	10.5 (10/1/2004)	(9.9 - 10.5)/(7 - 2)	-0.12
8.1 (10/1/2010)	10.5 (10/1/2004)	(8.1 - 10.5)/(8 - 2)	-0.4
7.4 (10/1/2011)	10.5 (10/1/2004)	(7.4 - 10.5)/(9 - 2)	-0.442857
4.7 (9/1/2012)	10.5 (10/1/2004)	(4.7 - 10.5)/(10 - 2)	-0.725
15 (10/1/2006)	7.82 (10/1/2005)	(15 - 7.82)/(4 - 3)	7.18
4.8 (10/1/2007)	7.82 (10/1/2005)	(4.8 - 7.82)/(5 - 3)	-1.51
16 (10/1/2008)	7.82 (10/1/2005)	(16 - 7.82)/(6 - 3)	2.72667
9.9 (10/1/2009)	7.82 (10/1/2005)	(9.9 - 7.82)/(7 - 3)	0.52
8.1 (10/1/2010)	7.82 (10/1/2005)	(8.1 - 7.82)/(8 - 3)	0.056
7.4 (10/1/2011)	7.82 (10/1/2005)	(7.4 - 7.82)/(9 - 3)	-0.07
4.7 (9/1/2012)	7.82 (10/1/2005)	(4.7 - 7.82)/(10 - 3)	-0.445714
4.8 (10/1/2007)	15 (10/1/2006)	(4.8 - 15)/(5 - 4)	-10.2
16 (10/1/2008)	15 (10/1/2006)	(16 - 15)/(6 - 4)	0.5
9.9 (10/1/2009)	15 (10/1/2006)	(9.9 - 15)/(7 - 4)	-1.7
8.1 (10/1/2010)	15 (10/1/2006)	(8.1 - 15)/(8 - 4)	-1.725
7.4 (10/1/2011)	15 (10/1/2006)	(7.4 - 15)/(9 - 4)	-1.52
4.7 (9/1/2012)	15 (10/1/2006)	(4.7 - 15)/(10 - 4)	-1.71667
16 (10/1/2008)	4.8 (10/1/2007)	(16 - 4.8)/(6 - 5)	11.2
9.9 (10/1/2009)	4.8 (10/1/2007)	(9.9 - 4.8)/(7 - 5)	2.55
8.1 (10/1/2010)	4.8 (10/1/2007)	(8.1 - 4.8)/(8 - 5)	1.1
7.4 (10/1/2011)	4.8 (10/1/2007)	(7.4 - 4.8)/(9 - 5)	0.65
4.7 (9/1/2012)	4.8 (10/1/2007)	(4.7 - 4.8)/(10 - 5)	-0.02
9.9 (10/1/2009)	16 (10/1/2008)	(9.9 - 16)/(7 - 6)	-6.1
8.1 (10/1/2010)	16 (10/1/2008)	(8.1 - 16)/(8 - 6)	-3.95
7.4 (10/1/2011)	16 (10/1/2008)	(7.4 - 16)/(9 - 6)	-2.86667
4.7 (9/1/2012)	16 (10/1/2008)	(4.7 - 16)/(10 - 6)	-2.825
8.1 (10/1/2010)	9.9 (10/1/2009)	(8.1 - 9.9)/(8 - 7)	-1.8
7.4 (10/1/2011)	9.9 (10/1/2009)	(7.4 - 9.9)/(9 - 7)	-1.25
4.7 (9/1/2012)	9.9 (10/1/2009)	(4.7 - 9.9)/(10 - 7)	-1.73333

7.4 (10/1/2011)	8.1 (10/1/2010)	(7.4 - 8.1)/(9 - 8)	-0.7
4.7 (9/1/2012)	8.1 (10/1/2010)	(4.7 - 8.1)/(10 - 8)	-1.7
4.7 (9/1/2012)	7.4 (10/1/2011)	(4.7 - 7.4)/(10 - 9)	-2.7

Number of Q values = 45

Ordered Q Values

n	Q
1	-10.2
2	-8.5
3	-6.1
4	-5.59
5	-3.95
6	-3.55
7	-2.86667
8	-2.825
9	-2.7
10	-2.68
11	-1.9
12	-1.8
13	-1.73333
14	-1.725
15	-1.71667
16	-1.7
17	-1.7
18	-1.58889
19	-1.55714
20	-1.52
21	-1.51667
22	-1.51
23	-1.45
24	-1.33333
25	-1.25
26	-0.725
27	-0.7
28	-0.6
29	-0.445714
30	-0.442857
31	-0.4
32	-0.12
33	-0.07
34	-0.02
35	0.056
36	0.5
37	0.52
38	0.65
39	1.1
40	1.375
41	2.25
42	2.55
43	2.72667
44	7.18
45	11.2

Sen's Estimator (Median Q) is -1.45

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
9/1/2012	1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0
a = 2250
b = 6480
c = 180
Group Variance = 125
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 14.3282
M1 = (45 - 14.3282)/2.0 = 15.3359
M2 = (45 + 14.3282)/2.0 + 1 = 30.6641
Lower limit is -1.71667 = Q(15)
Upper limit is -0.4 = Q(31)
-0.4 < 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 (9/1/2012)	ND<10 U (10/1/2000)	(24 - 10)/(13 - 1)	1.16667
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 (9/1/2012)	54 (10/1/2001)	(24 - 54)/(13 - 2)	-2.72727
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 (9/1/2012)	50 J (10/1/2002)	(24 - 50)/(13 - 3)	-2.6
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 (9/1/2012)	73 J (10/1/2003)	(24 - 73)/(13 - 4)	-5.44444
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 (9/1/2012)	69 J (10/1/2004)	(24 - 69)/(13 - 5)	-5.625
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 (9/1/2012)	49.5 J (10/1/2005)	(24 - 49.5)/(13 - 6)	-3.64286
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 (9/1/2012)	31 (10/1/2006)	(24 - 31)/(13 - 7)	-1.16667
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 (9/1/2012)	39 D (10/1/2007)	(24 - 39)/(13 - 8)	-3
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 (9/1/2012)	29 D (10/1/2008)	(24 - 29)/(13 - 9)	-1.25
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 (9/1/2012)	31 D (10/1/2009)	(24 - 31)/(13 - 10)	-2.33333
23 D (10/1/2011)	30 D (10/1/2010)	(23 - 30)/(12 - 11)	-7
24 D (9/1/2012)	30 D (10/1/2010)	(24 - 30)/(13 - 11)	-3
24 D (9/1/2012)	23 D (10/1/2011)	(24 - 23)/(13 - 12)	1

Number of Q values = 78

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	-5.25
22	-4.75
23	-4.625
24	-4.6
25	-4.41667
26	-4
27	-4
28	-4
29	-4
30	-4
31	-3.9
32	-3.64286
33	-3.57143
34	-3.5
35	-3.1
36	-3
37	-3
38	-3
39	-3
40	-2.875
41	-2.72727
42	-2.71429
43	-2.66667
44	-2.6
45	-2.5
46	-2.5
47	-2.33333
48	-2.2
49	-2
50	-1.6
51	-1.25
52	-1.16667
53	-1.125
54	-1
55	-1
56	-0.25
57	-0.166667
58	0
59	0.5
60	1
61	1.16667
62	1.18182
63	2
64	2
65	2.33333
66	2.375
67	3.5

68	4.14286
69	5
70	7.9
71	8
72	9.5
73	9.5
74	14.75
75	20
76	21
77	23
78	44

Sen's Estimator (Median Q) is -2.9375

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
9/1/2012	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 -4 = Q(29)
Upper limit is -1.6 = Q(50)
-1.6 < 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 (9/1/2012)	189 (10/1/2001)	(240 - 189)/(12 - 1)	4.63636
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 (9/1/2012)	420 (10/1/2002)	(240 - 420)/(12 - 2)	-18
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 (9/1/2012)	730 (10/1/2003)	(240 - 730)/(12 - 3)	-54.4444
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 (9/1/2012)	483 J (10/1/2004)	(240 - 483)/(12 - 4)	-30.375
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 (9/1/2012)	542 J (10/1/2005)	(240 - 542)/(12 - 5)	-43.1429
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 (9/1/2012)	420 (10/1/2006)	(240 - 420)/(12 - 6)	-30
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 (9/1/2012)	570 D (10/1/2007)	(240 - 570)/(12 - 7)	-66
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 (9/1/2012)	340 JD (10/1/2008)	(240 - 340)/(12 - 8)	-25
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 (9/1/2012)	340 D (10/1/2009)	(240 - 340)/(12 - 9)	-33.3333
280 DJ (10/1/2011)	400 D (10/1/2010)	(280 - 400)/(11 - 10)	-120
240 D (9/1/2012)	400 D (10/1/2010)	(240 - 400)/(12 - 10)	-80
240 D (9/1/2012)	280 DJ (10/1/2011)	(240 - 280)/(12 - 11)	-40

Number of Q values = 66

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	-72.5
11	-67.3333
12	-66
13	-65
14	-56.6667
15	-56.25
16	-54.4444
17	-50.5
18	-47.1429
19	-43.6667
20	-43.1429
21	-40
22	-40
23	-40

24	-35.75
25	-33.3333
26	-31.5
27	-30.375
28	-30
29	-30
30	-29
31	-28.6
32	-28.4
33	-28
34	-26.6667
35	-25
36	-20
37	-18
38	-15.5556
39	-13.8333
40	-13.3333
41	-11.4286
42	-5
43	-2.5
44	0
45	0
46	4.63636
47	9.1
48	14
49	18.875
50	21.5714
51	23.4444
52	29
53	30
54	30
55	31.5
56	40.6667
57	46.2
58	59
59	60
60	63.5
61	88.25
62	98
63	150
64	231
65	270.5
66	310

Sen's Estimator (Median Q) is -27.3333

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
9/1/2012	1

There are 0 time periods with multiple data

A = 36
B = 0
C = 0
D = 0
E = 4
F = 0
a = 3828
b = 11880
c = 264
Group Variance = 210.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 18.6009
M1 = (66 - 18.6009)/2.0 = 23.6996
M2 = (66 + 18.6009)/2.0 + 1 = 43.3004
Lower limit is -35.75 = Q(24)
Upper limit is -2.5 = Q(43)
-2.5 < 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 (9/1/2012)	32.6 (10/1/2000)	(17 - 32.6)/(12 - 1)	-1.41818
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 (9/1/2012)	29 (10/1/2001)	(17 - 29)/(12 - 2)	-1.2
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 (9/1/2012)	21.7 (10/1/2002)	(17 - 21.7)/(12 - 3)	-0.522222
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 (9/1/2012)	84.6 (10/1/2003)	(17 - 84.6)/(12 - 4)	-8.45
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 (9/1/2012)	25.3 (10/1/2004)	(17 - 25.3)/(12 - 5)	-1.18571
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 (9/1/2012)	20.8 (10/1/2005)	(17 - 20.8)/(12 - 6)	-0.633333
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 (9/1/2012)	15 (10/1/2006)	(17 - 15)/(12 - 7)	0.4
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 (9/1/2012)	36.8 J (10/1/2007)	(17 - 36.8)/(12 - 8)	-4.95
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 (9/1/2012)	23.8 (10/1/2008)	(17 - 23.8)/(12 - 9)	-2.26667
13.8 (10/1/2010)	17.5 (10/1/2009)	(13.8 - 17.5)/(11 - 10)	-3.7
17 (9/1/2012)	17.5 (10/1/2009)	(17 - 17.5)/(12 - 10)	-0.25
17 (9/1/2012)	13.8 (10/1/2010)	(17 - 13.8)/(12 - 11)	3.2

Number of Q values = 66

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	-5.8
15	-5.45
16	-5.15
17	-5
18	-4.95
19	-4.5
20	-3.7
21	-3.6
22	-2.93333
23	-2.8

24	-2.36
25	-2.26667
26	-2.05
27	-1.91667
28	-1.88
29	-1.825
30	-1.68889
31	-1.67778
32	-1.675
33	-1.56
34	-1.4375
35	-1.41818
36	-1.4
37	-1.23333
38	-1.2
39	-1.18571
40	-1.1
41	-0.9875
42	-0.825
43	-0.742857
44	-0.633333
45	-0.6
46	-0.522222
47	-0.375
48	-0.3
49	-0.3
50	-0.25
51	0.35
52	0.4
53	0.6
54	0.833333
55	1
56	1.3
57	1.8
58	3.02
59	3.2
60	3.83333
61	4.4
62	8
63	17.3333
64	21.8
65	27.8
66	62.9

Sen's Estimator (Median Q) is -1.49875

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

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 -2.36 = Q(24)
Upper limit is -0.742857 = Q(43)
-0.742857 < 0 indicating a downward 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 (9/1/2012)	4230 (10/1/2001)	(3200 - 4230)/(12 - 1)	-93.6364
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 (9/1/2012)	3500 (10/1/2002)	(3200 - 3500)/(12 - 2)	-30
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 (9/1/2012)	3900 (10/1/2003)	(3200 - 3900)/(12 - 3)	-77.7778
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 (9/1/2012)	5760 (10/1/2004)	(3200 - 5760)/(12 - 4)	-320
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 (9/1/2012)	4060 J (10/1/2005)	(3200 - 4060)/(12 - 5)	-122.857
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 (9/1/2012)	5500 (10/1/2006)	(3200 - 5500)/(12 - 6)	-383.333
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 (9/1/2012)	4800 Y (10/1/2007)	(3200 - 4800)/(12 - 7)	-320
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 (9/1/2012)	5000 Y (10/1/2008)	(3200 - 5000)/(12 - 8)	-450
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 (9/1/2012)	2400 Y (10/1/2009)	(3200 - 2400)/(12 - 9)	266.667
4200 Y (10/1/2011)	4000 Y (10/1/2010)	(4200 - 4000)/(11 - 10)	200
3200 Y (9/1/2012)	4000 Y (10/1/2010)	(3200 - 4000)/(12 - 10)	-400
3200 Y (9/1/2012)	4200 Y (10/1/2011)	(3200 - 4200)/(12 - 11)	-1000

Number of Q values = 66

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	-320
16	-320
17	-320
18	-293.333
19	-266.667
20	-266.667
21	-260
22	-250
23	-250

24	-228.75
25	-222.857
26	-190
27	-165
28	-157.143
29	-150
30	-130
31	-122.857
32	-93.6364
33	-77.7778
34	-42.5
35	-30
36	-25.5556
37	-12
38	-3
39	14.2857
40	23.3333
41	37.5
42	62.5
43	77.7778
44	80
45	95
46	110
47	186.667
48	200
49	200
50	220
51	225
52	250
53	254
54	260
55	266.667
56	313.333
57	370
58	400
59	500
60	510
61	533.333
62	900
63	1130
64	1440
65	1600
66	1860

Sen's Estimator (Median Q) is -60.1389

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

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 -228.75 = Q(24)
Upper limit is 77.7778 = Q(43)
-228.75 < 0 < 77.7778 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 (9/1/2012)	3900 (10/1/2006)	(2300 - 3900)/(7 - 1)	-266.667
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 (9/1/2012)	3300 Y (10/1/2007)	(2300 - 3300)/(7 - 2)	-200
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 (9/1/2012)	3500 Y (10/1/2008)	(2300 - 3500)/(7 - 3)	-300
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 (9/1/2012)	2400 Y (10/1/2009)	(2300 - 2400)/(7 - 4)	-33.3333
2400 Y (10/1/2011)	4400 Z (10/1/2010)	(2400 - 4400)/(6 - 5)	-2000
2300 Y (9/1/2012)	4400 Z (10/1/2010)	(2300 - 4400)/(7 - 5)	-1050
2300 Y (9/1/2012)	2400 Y (10/1/2011)	(2300 - 2400)/(7 - 6)	-100

Number of Q values = 21

Ordered Q Values

n	Q
1	-2000
2	-1100
3	-1050
4	-600
5	-500
6	-450
7	-366.667
8	-300
9	-300
10	-266.667
11	-225
12	-200
13	-200
14	-100
15	-33.3333

16	0
17	125
18	200
19	366.667
20	450
21	2000

Sen's Estimator (Median Q) is -225

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
9/1/2012	1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 798
b = 1890
c = 84
Group Variance = 43.3333
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 8.4362
M1 = (21 - 8.4362)/2.0 = 6.2819
M2 = (21 + 8.4362)/2.0 + 1 = 15.7181
Lower limit is -450 = Q(6)
Upper limit is 0 = Q(16)
-450 < 0 < 0 indicating no trend in data.

Sen's Slope Analysis

Parameter: DRO

Location: 04-175

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
11000 (10/1/2006)	7080 J (10/1/2005)	(11000 - 7080)/(2 - 1)	3920
6600 Y (10/1/2007)	7080 J (10/1/2005)	(6600 - 7080)/(3 - 1)	-240
4700 Y (10/1/2008)	7080 J (10/1/2005)	(4700 - 7080)/(4 - 1)	-793.333
7700 Y (10/1/2009)	7080 J (10/1/2005)	(7700 - 7080)/(5 - 1)	155
6100 Y (10/1/2010)	7080 J (10/1/2005)	(6100 - 7080)/(6 - 1)	-196
5600 Y (10/1/2011)	7080 J (10/1/2005)	(5600 - 7080)/(7 - 1)	-246.667
5500 Y (8/1/2012)	7080 J (10/1/2005)	(5500 - 7080)/(8 - 1)	-225.714
6600 Y (10/1/2007)	11000 (10/1/2006)	(6600 - 11000)/(3 - 2)	-4400
4700 Y (10/1/2008)	11000 (10/1/2006)	(4700 - 11000)/(4 - 2)	-3150
7700 Y (10/1/2009)	11000 (10/1/2006)	(7700 - 11000)/(5 - 2)	-1100
6100 Y (10/1/2010)	11000 (10/1/2006)	(6100 - 11000)/(6 - 2)	-1225
5600 Y (10/1/2011)	11000 (10/1/2006)	(5600 - 11000)/(7 - 2)	-1080
5500 Y (8/1/2012)	11000 (10/1/2006)	(5500 - 11000)/(8 - 2)	-916.667
4700 Y (10/1/2008)	6600 Y (10/1/2007)	(4700 - 6600)/(4 - 3)	-1900
7700 Y (10/1/2009)	6600 Y (10/1/2007)	(7700 - 6600)/(5 - 3)	550
6100 Y (10/1/2010)	6600 Y (10/1/2007)	(6100 - 6600)/(6 - 3)	-166.667
5600 Y (10/1/2011)	6600 Y (10/1/2007)	(5600 - 6600)/(7 - 3)	-250
5500 Y (8/1/2012)	6600 Y (10/1/2007)	(5500 - 6600)/(8 - 3)	-220
7700 Y (10/1/2009)	4700 Y (10/1/2008)	(7700 - 4700)/(5 - 4)	3000
6100 Y (10/1/2010)	4700 Y (10/1/2008)	(6100 - 4700)/(6 - 4)	700
5600 Y (10/1/2011)	4700 Y (10/1/2008)	(5600 - 4700)/(7 - 4)	300
5500 Y (8/1/2012)	4700 Y (10/1/2008)	(5500 - 4700)/(8 - 4)	200
6100 Y (10/1/2010)	7700 Y (10/1/2009)	(6100 - 7700)/(6 - 5)	-1600
5600 Y (10/1/2011)	7700 Y (10/1/2009)	(5600 - 7700)/(7 - 5)	-1050
5500 Y (8/1/2012)	7700 Y (10/1/2009)	(5500 - 7700)/(8 - 5)	-733.333
5600 Y (10/1/2011)	6100 Y (10/1/2010)	(5600 - 6100)/(7 - 6)	-500
5500 Y (8/1/2012)	6100 Y (10/1/2010)	(5500 - 6100)/(8 - 6)	-300
5500 Y (8/1/2012)	5600 Y (10/1/2011)	(5500 - 5600)/(8 - 7)	-100

Number of Q values = 28

Ordered Q Values

n	Q
1	-4400
2	-3150
3	-1900
4	-1600
5	-1225
6	-1100
7	-1080

8	-1050
9	-916.667
10	-793.333
11	-733.333
12	-500
13	-300
14	-250
15	-246.667
16	-240
17	-225.714
18	-220
19	-196
20	-166.667
21	-100
22	155
23	200
24	300
25	550
26	700
27	3000
28	3920

Sen's Estimator (Median Q) is -248.333

Time Period	Observations
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
8/1/2012	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 -916.667 = Q(9)
Upper limit is -166.667 = Q(20)
-166.667 < 0 indicating a downward 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 (9/1/2012)	1600 (10/1/2003)	(3800 - 1600)/(10 - 1)	244.444
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 (9/1/2012)	5300 J (10/1/2004)	(3800 - 5300)/(10 - 2)	-187.5
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 (9/1/2012)	4420 J (10/1/2005)	(3800 - 4420)/(10 - 3)	-88.5714
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 (9/1/2012)	5200 J (10/1/2006)	(3800 - 5200)/(10 - 4)	-233.333
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 (9/1/2012)	4400 Y (10/1/2007)	(3800 - 4400)/(10 - 5)	-120
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 (9/1/2012)	4000 Z (10/1/2008)	(3800 - 4000)/(10 - 6)	-50
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 (9/1/2012)	4400 Z (10/1/2009)	(3800 - 4400)/(10 - 7)	-200

2900 Y (10/1/2011)	3100 Y (10/1/2010)	(2900 - 3100)/(9 - 8)	-200
3800 Y (9/1/2012)	3100 Y (10/1/2010)	(3800 - 3100)/(10 - 8)	350
3800 Y (9/1/2012)	2900 Y (10/1/2011)	(3800 - 2900)/(10 - 9)	900

Number of Q values = 45

Ordered Q Values

n	Q
1	-1300
2	-880
3	-800
4	-750
5	-600
6	-525
7	-460
8	-450
9	-433.333
10	-400
11	-375
12	-366.667
13	-366.667
14	-342.857
15	-325
16	-300
17	-266.667
18	-264
19	-253.333
20	-233.333
21	-200
22	-200
23	-187.5
24	-180
25	-140
26	-120
27	-88.5714
28	-50
29	-50
30	-10
31	-5
32	0
33	162.5
34	214.286
35	244.444
36	350
37	400
38	466.667
39	480
40	700
41	780
42	900
43	1200
44	1410
45	3700

Sen's Estimator (Median Q) is -187.5

Tied Group	Value	Members
1	4400	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
9/1/2012	1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 2250
b = 6480
c = 180
Group Variance = 124
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 14.2707
M1 = (45 - 14.2707)/2.0 = 15.3646
M2 = (45 + 14.2707)/2.0 + 1 = 30.6354
Lower limit is -325 = Q(15)
Upper limit is -5 = Q(31)
-5 < 0 indicating a downward 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 (9/1/2012)	15900 (10/1/2001)	(7000 - 15900)/(12 - 1)	-809.091
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 (9/1/2012)	12000 (10/1/2002)	(7000 - 12000)/(12 - 2)	-500
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 (9/1/2012)	13000 (10/1/2003)	(7000 - 13000)/(12 - 3)	-666.667
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 (9/1/2012)	16100 J (10/1/2004)	(7000 - 16100)/(12 - 4)	-1137.5
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 (9/1/2012)	12600 J (10/1/2005)	(7000 - 12600)/(12 - 5)	-800
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 (9/1/2012)	9900 (10/1/2006)	(7000 - 9900)/(12 - 6)	-483.333
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 (9/1/2012)	14000 DY (10/1/2007)	(7000 - 14000)/(12 - 7)	-1400
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 (9/1/2012)	11000 DY (10/1/2008)	(7000 - 11000)/(12 - 8)	-1000
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 (9/1/2012)	15000 DY (10/1/2009)	(7000 - 15000)/(12 - 9)	-2666.67
11000 DY (10/1/2011)	9000 DY (10/1/2010)	(11000 - 9000)/(11 - 10)	2000
7000 Y (9/1/2012)	9000 DY (10/1/2010)	(7000 - 9000)/(12 - 10)	-1000
7000 Y (9/1/2012)	11000 DY (10/1/2011)	(7000 - 11000)/(12 - 11)	-4000

Number of Q values = 66

Ordered Q Values

n	Q
1	-6000
2	-4000
3	-3900
4	-3500
5	-3100
6	-3000
7	-2700
8	-2666.67
9	-2000
10	-1666.67
11	-1450
12	-1400
13	-1275
14	-1200
15	-1183.33
16	-1137.5
17	-1033.33
18	-1000
19	-1000
20	-1000
21	-825
22	-809.091
23	-800

24	-766.667
25	-750
26	-728.571
27	-720
28	-700
29	-700
30	-666.667
31	-571.429
32	-533.333
33	-525
34	-500
35	-490
36	-483.333
37	-400
38	-375
39	-316.667
40	-266.667
41	-250
42	-225
43	-220
44	-200
45	-166.667
46	-112.5
47	-111.111
48	0
49	66.6667
50	200
51	220
52	250
53	333.333
54	400
55	428.571
56	500
57	550
58	600
59	700
60	1000
61	1700
62	2000
63	2050
64	3100
65	4000
66	4100

Sen's Estimator (Median Q) is -512.5

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
9/1/2012	1

There are 0 time periods with multiple data

A = 18
B = 0
C = 0
D = 0
E = 2
F = 0
a = 3828
b = 11880
c = 264
Group Variance = 211.667
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 18.645
M1 = (66 - 18.645)/2.0 = 23.6775
M2 = (66 + 18.645)/2.0 + 1 = 43.3225
Lower limit is -766.667 = Q(24)
Upper limit is -220 = Q(43)
-220 < 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 (9/1/2012)	2000 (10/1/2003)	(2000 - 2000)/(10 - 1)	0
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 (9/1/2012)	6880 J (10/1/2004)	(2000 - 6880)/(10 - 2)	-610
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 (9/1/2012)	3900 J (10/1/2005)	(2000 - 3900)/(10 - 3)	-271.429
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 (9/1/2012)	6300 (10/1/2006)	(2000 - 6300)/(10 - 4)	-716.667
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 (9/1/2012)	3900 Z (10/1/2007)	(2000 - 3900)/(10 - 5)	-380
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 (9/1/2012)	2700 Z (10/1/2008)	(2000 - 2700)/(10 - 6)	-175
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 (9/1/2012)	5100 Z (10/1/2009)	(2000 - 5100)/(10 - 7)	-1033.33

3400 Y (10/1/2011)	3800 Y (10/1/2010)	(3400 - 3800)/(9 - 8)	-400
2000 Y (9/1/2012)	3800 Y (10/1/2010)	(2000 - 3800)/(10 - 8)	-900
2000 Y (9/1/2012)	3400 Y (10/1/2011)	(2000 - 3400)/(10 - 9)	-1400

Number of Q values = 45

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	-513.333
17	-497.143
18	-400
19	-400
20	-400
21	-380
22	-356
23	-290
24	-271.429
25	-175
26	-125
27	-83.3333
28	-33.3333
29	-20
30	0
31	0
32	140
33	175
34	233.333
35	257.143
36	300
37	475
38	516.667
39	550
40	600
41	950
42	1433.33
43	2400
44	2400
45	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
9/1/2012	1

There are 0 time periods with multiple data

A = 36
B = 0
C = 0
D = 0
E = 4
F = 0
a = 2250
b = 6480
c = 180
Group Variance = 123
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 14.2131
M1 = (45 - 14.2131)/2.0 = 15.3935
M2 = (45 + 14.2131)/2.0 + 1 = 30.6065
Lower limit is -580 = Q(15)
Upper limit is 0 = Q(31)
-580 < 0 < 0 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 (9/1/2012)	8200 (10/1/2006)	(3400 - 8200)/(7 - 1)	-800
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 (9/1/2012)	6700 DY (10/1/2007)	(3400 - 6700)/(7 - 2)	-660
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 (9/1/2012)	5300 Y (10/1/2008)	(3400 - 5300)/(7 - 3)	-475
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 (9/1/2012)	3600 Y (10/1/2009)	(3400 - 3600)/(7 - 4)	-66.6667
3200 Y (10/1/2011)	1500 Y (10/1/2010)	(3200 - 1500)/(6 - 5)	1700
3400 Y (9/1/2012)	1500 Y (10/1/2010)	(3400 - 1500)/(7 - 5)	950
3400 Y (9/1/2012)	3200 Y (10/1/2011)	(3400 - 3200)/(7 - 6)	200

Number of Q values = 21

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	-660

16	-475
17	-200
18	-66.6667
19	200
20	950
21	1700

Sen's Estimator (Median Q) is -1000

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
9/1/2012	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 -1550 = Q(6)
Upper limit is -475 = Q(16)
-475 < 0 indicating a downward trend in data.

Sen's Slope Analysis

Parameter: PCE

Location: 01-153

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

80% Confidence Level

Xj	Xk	(Xj - Xk)/(j-k)	Q
7.74 (10/1/2004)	27 (10/1/2003)	(7.74 - 27)/(2 - 1)	-19.26
6.75 (10/1/2005)	27 (10/1/2003)	(6.75 - 27)/(3 - 1)	-10.125
11 (10/1/2006)	27 (10/1/2003)	(11 - 27)/(4 - 1)	-5.33333
8.2 (10/1/2007)	27 (10/1/2003)	(8.2 - 27)/(5 - 1)	-4.7
7.2 (10/1/2008)	27 (10/1/2003)	(7.2 - 27)/(6 - 1)	-3.96
3.6 (10/1/2009)	27 (10/1/2003)	(3.6 - 27)/(7 - 1)	-3.9
6 (10/1/2010)	27 (10/1/2003)	(6 - 27)/(8 - 1)	-3
3.9 (9/1/2012)	27 (10/1/2003)	(3.9 - 27)/(9 - 1)	-2.8875
6.75 (10/1/2005)	7.74 (10/1/2004)	(6.75 - 7.74)/(3 - 2)	-0.99
11 (10/1/2006)	7.74 (10/1/2004)	(11 - 7.74)/(4 - 2)	1.63
8.2 (10/1/2007)	7.74 (10/1/2004)	(8.2 - 7.74)/(5 - 2)	0.153333
7.2 (10/1/2008)	7.74 (10/1/2004)	(7.2 - 7.74)/(6 - 2)	-0.135
3.6 (10/1/2009)	7.74 (10/1/2004)	(3.6 - 7.74)/(7 - 2)	-0.828
6 (10/1/2010)	7.74 (10/1/2004)	(6 - 7.74)/(8 - 2)	-0.29
3.9 (9/1/2012)	7.74 (10/1/2004)	(3.9 - 7.74)/(9 - 2)	-0.548571
11 (10/1/2006)	6.75 (10/1/2005)	(11 - 6.75)/(4 - 3)	4.25
8.2 (10/1/2007)	6.75 (10/1/2005)	(8.2 - 6.75)/(5 - 3)	0.725
7.2 (10/1/2008)	6.75 (10/1/2005)	(7.2 - 6.75)/(6 - 3)	0.15
3.6 (10/1/2009)	6.75 (10/1/2005)	(3.6 - 6.75)/(7 - 3)	-0.7875
6 (10/1/2010)	6.75 (10/1/2005)	(6 - 6.75)/(8 - 3)	-0.15
3.9 (9/1/2012)	6.75 (10/1/2005)	(3.9 - 6.75)/(9 - 3)	-0.475
8.2 (10/1/2007)	11 (10/1/2006)	(8.2 - 11)/(5 - 4)	-2.8
7.2 (10/1/2008)	11 (10/1/2006)	(7.2 - 11)/(6 - 4)	-1.9
3.6 (10/1/2009)	11 (10/1/2006)	(3.6 - 11)/(7 - 4)	-2.46667
6 (10/1/2010)	11 (10/1/2006)	(6 - 11)/(8 - 4)	-1.25
3.9 (9/1/2012)	11 (10/1/2006)	(3.9 - 11)/(9 - 4)	-1.42
7.2 (10/1/2008)	8.2 (10/1/2007)	(7.2 - 8.2)/(6 - 5)	-1
3.6 (10/1/2009)	8.2 (10/1/2007)	(3.6 - 8.2)/(7 - 5)	-2.3
6 (10/1/2010)	8.2 (10/1/2007)	(6 - 8.2)/(8 - 5)	-0.733333
3.9 (9/1/2012)	8.2 (10/1/2007)	(3.9 - 8.2)/(9 - 5)	-1.075
3.6 (10/1/2009)	7.2 (10/1/2008)	(3.6 - 7.2)/(7 - 6)	-3.6
6 (10/1/2010)	7.2 (10/1/2008)	(6 - 7.2)/(8 - 6)	-0.6
3.9 (9/1/2012)	7.2 (10/1/2008)	(3.9 - 7.2)/(9 - 6)	-1.1
6 (10/1/2010)	3.6 (10/1/2009)	(6 - 3.6)/(8 - 7)	2.4
3.9 (9/1/2012)	3.6 (10/1/2009)	(3.9 - 3.6)/(9 - 7)	0.15
3.9 (9/1/2012)	6 (10/1/2010)	(3.9 - 6)/(9 - 8)	-2.1

Number of Q values = 36

Ordered Q Values

n	Q
1	-19.26
2	-10.125
3	-5.33333
4	-4.7
5	-3.96
6	-3.9
7	-3.6
8	-3
9	-2.8875
10	-2.8
11	-2.46667
12	-2.3
13	-2.1
14	-1.9
15	-1.42
16	-1.25
17	-1.1
18	-1.075
19	-1
20	-0.99
21	-0.828
22	-0.7875
23	-0.733333
24	-0.6
25	-0.548571
26	-0.475
27	-0.29
28	-0.15
29	-0.135
30	0.15
31	0.15
32	0.153333
33	0.725
34	1.63
35	2.4
36	4.25

Sen's Estimator (Median Q) is -1.0375

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
9/1/2012	1

There are 0 time periods with multiple data

A = 0
B = 0
C = 0
D = 0
E = 0
F = 0

a = 1656
b = 4536
c = 144
Group Variance = 92
For 80% confidence interval (two-tailed), Z at (1-0.8)/2 = 1.28155
C = 12.2922
M1 = (36 - 12.2922)/2.0 = 11.8539
M2 = (36 + 12.2922)/2.0 + 1 = 25.1461
Lower limit is -2.3 = Q(12)
Upper limit is -0.548571 = Q(25)
-0.548571 < 0 indicating a downward trend in data.

Sen's Slope Analysis

Parameter: Total 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
30.6 (10/1/2001)	31.9 (10/1/2000)	(30.6 - 31.9)/(2 - 1)	-1.3
29.8 (10/1/2002)	31.9 (10/1/2000)	(29.8 - 31.9)/(3 - 1)	-1.05
83.6 (10/1/2003)	31.9 (10/1/2000)	(83.6 - 31.9)/(4 - 1)	17.2333
21.5 (10/1/2004)	31.9 (10/1/2000)	(21.5 - 31.9)/(5 - 1)	-2.6
22.3 (10/1/2005)	31.9 (10/1/2000)	(22.3 - 31.9)/(6 - 1)	-1.92
14.7 (10/1/2006)	31.9 (10/1/2000)	(14.7 - 31.9)/(7 - 1)	-2.86667
41.5 J (10/1/2007)	31.9 (10/1/2000)	(41.5 - 31.9)/(8 - 1)	1.37143
24.3 (10/1/2008)	31.9 (10/1/2000)	(24.3 - 31.9)/(9 - 1)	-0.95
16.7 (10/1/2009)	31.9 (10/1/2000)	(16.7 - 31.9)/(10 - 1)	-1.68889
14.4 (10/1/2010)	31.9 (10/1/2000)	(14.4 - 31.9)/(11 - 1)	-1.75
17.2 (9/1/2012)	31.9 (10/1/2000)	(17.2 - 31.9)/(12 - 1)	-1.33636
29.8 (10/1/2002)	30.6 (10/1/2001)	(29.8 - 30.6)/(3 - 2)	-0.8
83.6 (10/1/2003)	30.6 (10/1/2001)	(83.6 - 30.6)/(4 - 2)	26.5
21.5 (10/1/2004)	30.6 (10/1/2001)	(21.5 - 30.6)/(5 - 2)	-3.03333
22.3 (10/1/2005)	30.6 (10/1/2001)	(22.3 - 30.6)/(6 - 2)	-2.075
14.7 (10/1/2006)	30.6 (10/1/2001)	(14.7 - 30.6)/(7 - 2)	-3.18
41.5 J (10/1/2007)	30.6 (10/1/2001)	(41.5 - 30.6)/(8 - 2)	1.81667
24.3 (10/1/2008)	30.6 (10/1/2001)	(24.3 - 30.6)/(9 - 2)	-0.9
16.7 (10/1/2009)	30.6 (10/1/2001)	(16.7 - 30.6)/(10 - 2)	-1.7375
14.4 (10/1/2010)	30.6 (10/1/2001)	(14.4 - 30.6)/(11 - 2)	-1.8
17.2 (9/1/2012)	30.6 (10/1/2001)	(17.2 - 30.6)/(12 - 2)	-1.34
83.6 (10/1/2003)	29.8 (10/1/2002)	(83.6 - 29.8)/(4 - 3)	53.8
21.5 (10/1/2004)	29.8 (10/1/2002)	(21.5 - 29.8)/(5 - 3)	-4.15
22.3 (10/1/2005)	29.8 (10/1/2002)	(22.3 - 29.8)/(6 - 3)	-2.5
14.7 (10/1/2006)	29.8 (10/1/2002)	(14.7 - 29.8)/(7 - 3)	-3.775
41.5 J (10/1/2007)	29.8 (10/1/2002)	(41.5 - 29.8)/(8 - 3)	2.34
24.3 (10/1/2008)	29.8 (10/1/2002)	(24.3 - 29.8)/(9 - 3)	-0.916667
16.7 (10/1/2009)	29.8 (10/1/2002)	(16.7 - 29.8)/(10 - 3)	-1.87143
14.4 (10/1/2010)	29.8 (10/1/2002)	(14.4 - 29.8)/(11 - 3)	-1.925
17.2 (9/1/2012)	29.8 (10/1/2002)	(17.2 - 29.8)/(12 - 3)	-1.4
21.5 (10/1/2004)	83.6 (10/1/2003)	(21.5 - 83.6)/(5 - 4)	-62.1
22.3 (10/1/2005)	83.6 (10/1/2003)	(22.3 - 83.6)/(6 - 4)	-30.65
14.7 (10/1/2006)	83.6 (10/1/2003)	(14.7 - 83.6)/(7 - 4)	-22.9667
41.5 J (10/1/2007)	83.6 (10/1/2003)	(41.5 - 83.6)/(8 - 4)	-10.525
24.3 (10/1/2008)	83.6 (10/1/2003)	(24.3 - 83.6)/(9 - 4)	-11.86
16.7 (10/1/2009)	83.6 (10/1/2003)	(16.7 - 83.6)/(10 - 4)	-11.15
14.4 (10/1/2010)	83.6 (10/1/2003)	(14.4 - 83.6)/(11 - 4)	-9.88571
17.2 (9/1/2012)	83.6 (10/1/2003)	(17.2 - 83.6)/(12 - 4)	-8.3
22.3 (10/1/2005)	21.5 (10/1/2004)	(22.3 - 21.5)/(6 - 5)	0.8
14.7 (10/1/2006)	21.5 (10/1/2004)	(14.7 - 21.5)/(7 - 5)	-3.4
41.5 J (10/1/2007)	21.5 (10/1/2004)	(41.5 - 21.5)/(8 - 5)	6.66667
24.3 (10/1/2008)	21.5 (10/1/2004)	(24.3 - 21.5)/(9 - 5)	0.7
16.7 (10/1/2009)	21.5 (10/1/2004)	(16.7 - 21.5)/(10 - 5)	-0.96
14.4 (10/1/2010)	21.5 (10/1/2004)	(14.4 - 21.5)/(11 - 5)	-1.18333

17.2 (9/1/2012)	21.5 (10/1/2004)	(17.2 - 21.5)/(12 - 5)	-0.614286
14.7 (10/1/2006)	22.3 (10/1/2005)	(14.7 - 22.3)/(7 - 6)	-7.6
41.5 J (10/1/2007)	22.3 (10/1/2005)	(41.5 - 22.3)/(8 - 6)	9.6
24.3 (10/1/2008)	22.3 (10/1/2005)	(24.3 - 22.3)/(9 - 6)	0.666667
16.7 (10/1/2009)	22.3 (10/1/2005)	(16.7 - 22.3)/(10 - 6)	-1.4
14.4 (10/1/2010)	22.3 (10/1/2005)	(14.4 - 22.3)/(11 - 6)	-1.58
17.2 (9/1/2012)	22.3 (10/1/2005)	(17.2 - 22.3)/(12 - 6)	-0.85
41.5 J (10/1/2007)	14.7 (10/1/2006)	(41.5 - 14.7)/(8 - 7)	26.8
24.3 (10/1/2008)	14.7 (10/1/2006)	(24.3 - 14.7)/(9 - 7)	4.8
16.7 (10/1/2009)	14.7 (10/1/2006)	(16.7 - 14.7)/(10 - 7)	0.666667
14.4 (10/1/2010)	14.7 (10/1/2006)	(14.4 - 14.7)/(11 - 7)	-0.075
17.2 (9/1/2012)	14.7 (10/1/2006)	(17.2 - 14.7)/(12 - 7)	0.5
24.3 (10/1/2008)	41.5 J (10/1/2007)	(24.3 - 41.5)/(9 - 8)	-17.2
16.7 (10/1/2009)	41.5 J (10/1/2007)	(16.7 - 41.5)/(10 - 8)	-12.4
14.4 (10/1/2010)	41.5 J (10/1/2007)	(14.4 - 41.5)/(11 - 8)	-9.03333
17.2 (9/1/2012)	41.5 J (10/1/2007)	(17.2 - 41.5)/(12 - 8)	-6.075
16.7 (10/1/2009)	24.3 (10/1/2008)	(16.7 - 24.3)/(10 - 9)	-7.6
14.4 (10/1/2010)	24.3 (10/1/2008)	(14.4 - 24.3)/(11 - 9)	-4.95
17.2 (9/1/2012)	24.3 (10/1/2008)	(17.2 - 24.3)/(12 - 9)	-2.36667
14.4 (10/1/2010)	16.7 (10/1/2009)	(14.4 - 16.7)/(11 - 10)	-2.3
17.2 (9/1/2012)	16.7 (10/1/2009)	(17.2 - 16.7)/(12 - 10)	0.25
17.2 (9/1/2012)	14.4 (10/1/2010)	(17.2 - 14.4)/(12 - 11)	2.8

Number of Q values = 66

Ordered Q Values

n	Q
1	-62.1
2	-30.65
3	-22.9667
4	-17.2
5	-12.4
6	-11.86
7	-11.15
8	-10.525
9	-9.88571
10	-9.03333
11	-8.3
12	-7.6
13	-7.6
14	-6.075
15	-4.95
16	-4.15
17	-3.775
18	-3.4
19	-3.18
20	-3.03333
21	-2.86667
22	-2.6
23	-2.5

24	-2.36667
25	-2.3
26	-2.075
27	-1.925
28	-1.92
29	-1.87143
30	-1.8
31	-1.75
32	-1.7375
33	-1.68889
34	-1.58
35	-1.4
36	-1.4
37	-1.34
38	-1.33636
39	-1.3
40	-1.18333
41	-1.05
42	-0.96
43	-0.95
44	-0.916667
45	-0.9
46	-0.85
47	-0.8
48	-0.614286
49	-0.075
50	0.25
51	0.5
52	0.666667
53	0.666667
54	0.7
55	0.8
56	1.37143
57	1.81667
58	2.34
59	2.8
60	4.8
61	6.66667
62	9.6
63	17.2333
64	26.5
65	26.8
66	53.8

Sen's Estimator (Median Q) is -1.63444

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

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 -2.36667 = Q(24)
Upper limit is -0.95 = Q(43)
-0.95 < 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 (9/1/2012)	4.18 (10/1/2001)	(2.7 - 4.18)/(12 - 1)	-0.134545
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 (9/1/2012)	5.6 J (10/1/2002)	(2.7 - 5.6)/(12 - 2)	-0.29
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 (9/1/2012)	7 (10/1/2003)	(2.7 - 7)/(12 - 3)	-0.477778
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 (9/1/2012)	6.7 J (10/1/2004)	(2.7 - 6.7)/(12 - 4)	-0.5
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 (9/1/2012)	7.2 J (10/1/2005)	(2.7 - 7.2)/(12 - 5)	-0.642857
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 (9/1/2012)	7.4 (10/1/2006)	(2.7 - 7.4)/(12 - 6)	-0.783333
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 (9/1/2012)	3.4 D (10/1/2007)	(2.7 - 3.4)/(12 - 7)	-0.14
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 (9/1/2012)	6.1 (10/1/2008)	(2.7 - 6.1)/(12 - 8)	-0.85
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 (9/1/2012)	5.4 (10/1/2009)	(2.7 - 5.4)/(12 - 9)	-0.9
2.8 (10/1/2011)	4.3 (10/1/2010)	(2.8 - 4.3)/(11 - 10)	-1.5
2.7 (9/1/2012)	4.3 (10/1/2010)	(2.7 - 4.3)/(12 - 10)	-0.8
2.7 (9/1/2012)	2.8 (10/1/2011)	(2.7 - 2.8)/(12 - 11)	-0.1

Number of Q values = 66

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	-0.58
22	-0.557143
23	-0.525

24	-0.5
25	-0.477778
26	-0.45
27	-0.44
28	-0.4
29	-0.385714
30	-0.366667
31	-0.311111
32	-0.3
33	-0.29
34	-0.266667
35	-0.26
36	-0.18
37	-0.1625
38	-0.15
39	-0.15
40	-0.14
41	-0.138
42	-0.134545
43	-0.13
44	-0.1
45	-0.0285714
46	0.0133333
47	0.0833333
48	0.1
49	0.133333
50	0.1525
51	0.2
52	0.274286
53	0.3
54	0.35
55	0.45
56	0.5
57	0.533333
58	0.55
59	0.644
60	0.755
61	0.84
62	1
63	1.4
64	1.41
65	1.42
66	2.7

Sen's Estimator (Median Q) is -0.278333

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

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 -0.5 = Q(24)
Upper limit is -0.13 = Q(43)
-0.13 < 0 indicating a downward trend in data.

APPENDIX I

PHOTOGRAPHIC LOG

FORMER POWER PLANT BUILDING T-1451

Photo #1: Former Power Plant Building T-1451, view west, well 01-150 with East Canal in the background.

Photo #2: Former Power Plant Building T-1451, sediment/surface water sample NL-08, view west.

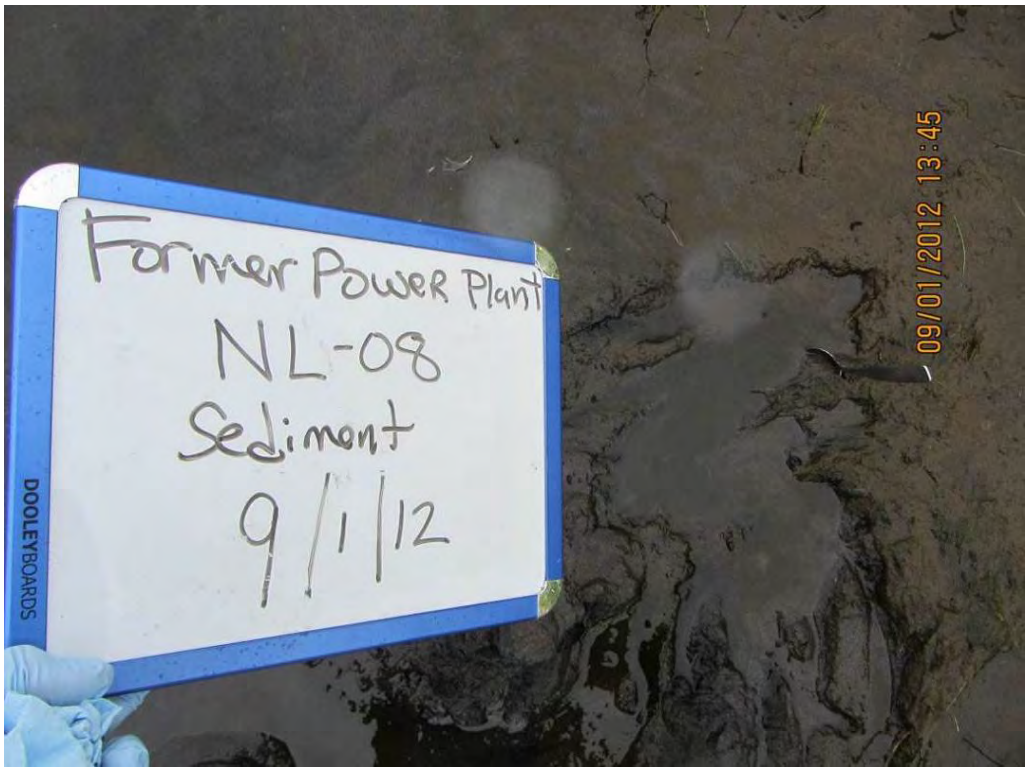


Photo #3: Former Power Plant Building T-1451, close-up view of sediment sample NL-08 location.

Photo #4: Former Power Plant Building T-1451, East Canal, start of shoreline inspection south end of Former Power Plant building in background (1 of 11 photos from south to north).

Photo #5: Former Power Plant Building T-1451, East Canal shoreline inspection heading north toward remediated shoreline seep (2 of 11 photos from south to north).

Photo #6: Former Power Plant Building T-1451, East Canal shoreline inspection heading north (3 of 11 photos from south to north).

Photo #7: Former Power Plant Building T-1451, East Canal shoreline inspection, view north (4 of 11 photos from south to north).

Photo #8: Former Power Plant Building T-1451, East Canal shoreline inspection view north (5 of 11 photos from south to north).

Photo #9: Former Power Plant Building T-1451, East Canal shoreline inspection, view north of petroleum seep at boom 11 (6 of 11 photos from south to north).

Photo #10: Former Power Plant Building T-1451, East Canal shoreline inspection, view south of boom 11 seep showing sheen and oily sediment (7 of 11 photos from south to north).

Photo #11: Former Power Plant Building T-1451, East Canal shoreline inspection, view north of boom 9/12 showing replaced shoreline (8 of 11 photos from south to north).

Photo #12: Former Power Plant Building T-1451, East Canal shoreline inspection, view north of remediated shoreline area and newly installed wells at boom 9/12 (9 of 11 photos from south to north).

Photo #13: Former Power Plant Building T-1451, East Canal shoreline inspection, view northwest of newly remediated shoreline area with newly installed wells at boom 9/12 (10 of 11 photos from south to north).

Photo #14: Former Power Plant Building T-1451, East Canal shoreline inspection, view southwest of small amount of sheen inside Boom 9/12 below remediated area (11 of 11 photos from south to north).

GCI COMPOUND AREA

Photo #15: GCI Compound Area, view northwest.

Photo #16: GCI Compound Area, view east of well 04-100.

Photo #17: GCI Compound Area, view east of well 04-701 with damaged bollard.

NMCB BUILDING T-1416 EXPANDED AREA

Photo #18: NMCB Building T-1416 Expanded Area, view west of well 02-301 with a j-plug in place of a monument lid.

Photo #19: NMCB Building T-1416 Expanded Area, view southeast of well 02-455.

Photo #20: NMCB Building T-1416 Expanded Area, view south of well 02-816.

Photo #21: NMCB Building T-1416 Expanded Area, shoreline inspection, view north from the west end of inspection adjacent to well 02-473 (1 of 22 photos west to east).

Photo #22: NMCB Building T-1416 Expanded Area, shoreline inspection, view northeast moving eastward along shoreline (2 of 22 photos west to east).

Photo #23: NMCB Building T-1416 Expanded Area, shoreline inspection, view east (3 of 22 photos west to east).

Photo #24: NMCB Building T-1416 Expanded Area, shoreline inspection, view east (4 of 22 photos west to east).

Photo #25: NMCB Building T-1416 Expanded Area, shoreline inspection, view northeast of stormwater outfall (5 of 22 photos west to east).

Photo #26: NMCB Building T-1416 Expanded Area, shoreline inspection, view east (6 of 22 photos west to east).

Photo #27: NMCB Building T-1416 Expanded Area, shoreline sediment sample NL-05, view north (7 of 22 photos west to east).

Photo #28: NMCB Building T-1416 Expanded Area, shoreline sediment sample NL-05, close-up, view north (8 of 22 photos west to east).

Photo #29: NMCB Building T-1416 Expanded Area, shoreline sediment sample NL-05, close-up, view north (9 of 22 photos west to east).

Photo #30: NMCB Building T-1416 Expanded Area, shoreline inspection, armor rock shoreline with pilings (10 of 22 photos west to east).

Photo #31: NMCB Building T-1416 Expanded Area, shoreline inspection, view east of armor rock with retaining wall in background (11 of 22 photos west to east).

Photo #32: NMCB Building T-1416 Expanded Area, shoreline inspection, view down of armor rock on shoreline (12 of 22 photos west to east).

Photo #33: NMCB Building T-1416 Expanded Area, shoreline inspection, view north up armor rock with western-most NMCB building in background (13 of 22 photos west to east).

Photo #34: NMCB Building T-1416 Expanded Area, shoreline inspection, view east closer to retaining wall (14 of 22 photos west to east).

Photo #35: NMCB Building T-1416 Expanded Area, shoreline inspection, view east of retaining wall and debris (15 of 22 photos west to east).

Photo #36: NMCB Building T-1416 Expanded Area, shoreline inspection, view east of pilings for retaining wall (16 of 22 photos west to east).

Photo #37: NMCB Building T-1416 Expanded Area, shoreline inspection, view north up shoreline toward eastern-most NMCB building (17 of 22 photos west to east).

Photo #38: NMCB Building T-1416 Expanded Area, shoreline inspection, view down from top of pilings on retaining wall (18 of 22 photos west to east).

Photo #39: NMCB Building T-1416 Expanded Area, shoreline inspection, view west-northwest looking back on retaining wall and both NMCB buildings (19 of 22 photos west to east).

Photo #40: NMCB Building T-1416 Expanded Area, shoreline inspection, view east of eastern shoreline (20 of 22 photos west to east).

Photo #41: NMCB Building T-1416 Expanded Area, shoreline inspection, view southeast of small spit east of site (21 of 22 photos west to east).

Photo #42: NMCB Building T-1416 Expanded Area, shoreline inspection, view west of small spit (22 of 22 photos west to east).

ROICC CONTRACTORS CAMP

Photo #43: ROICC Contractors Camp, view north of well 08-175.

Photo #44: ROICC Contractors Camp, view east of well 08-200.

Photo #45: ROICC Contractors Camp, view south of well 08-202.

RUNWAY 5-23 AVGAS VALVE PIT

Photo #46: Runway 5-23 Avgas Valve Pit, view northwest of well 14-100.

Photo #47: Runway 5-23 Avgas Valve Pit, view northwest of well 14-100 with flooding around well. Yakutat Hangar is in the background right.

SA 78, OLD TRANSPORTATION BUILDING

Photo #48: SA 78 Old Transportation Building site, view northwest toward site and sign.

Photo #49: SA 78 Old Transportation Building, view southeast from site of well 12-119 and Clam Lagoon shoreline.

Photo #50: SA 78 Old Transportation Building, view northeast of well 12-801.

Photo #51: SA 78 Old Transportation Building, shoreline inspection view southwest downgradient of well 12-801 (1 of 8 photos east to west).

Photo #52: SA 78 Old Transportation Building, shoreline inspection view southwest further along shoreline (2 of 8 photos east to west).

Photo #53: SA 78 Old Transportation Building, shoreline inspection view north at same location as photo #49 (3 of 8 photos east to west).

Photo #54: SA 78 Old Transportation Building, shoreline inspection view southwest downgradient of well 12-802 (4 of 8 photos east to west).

Photo #55: SA 78 Old Transportation Building, shoreline inspection view southwest further down shoreline (5 of 8 photos east to west).

Photo #56: SA 78 Old Transportation Building, shoreline inspection view of biogenic sheen (6 of 8 photos east to west).

Photo #57: SA 78 Old Transportation Building, shoreline inspection view northwest at site buildings (7 of 8 photos east to west).

Photo #58: SA 78 Old Transportation Building, shoreline inspection view southwest south of site (8 of 8 photos east to west).

SA 79, MAIN ROAD PIPELINE

Photo #59: SA 79, Main Road Pipeline site, view south.

Photo #60: SA 79, Main Road Pipeline, view southwest of well 02-230 with Sweeper Cove in background.

Photo #61: SA 79, Main Road Pipeline, view northeast of well 601 looking toward town.

Photo #62: SA 79, Main Road Pipeline, Sweeper Cove shoreline inspection, view north at southern-most starting point with well 602 in background (1 of 6 photos south to north).

Photo #63: SA 79, Main Road Pipeline, shoreline inspection, view north further north along shoreline (2 of 6 photos south to north).

Photo #64: SA 79, Main Road Pipeline, shoreline inspection, view north (3 of 6 photos south to north).

Photo #65: SA 79, Main Road Pipeline, shoreline inspection, view north downgradient of wells 02-230 and MRP-MW8 (4 of 6 photos south to north).

Photo #66: SA 79, Main Road Pipeline, shoreline inspection, view north with Main Road pipeline crossing South Sweeper Creek in background (5 of 6 photos south to north).

Photo #67: SA 79, Main Road Pipeline, shoreline inspection, view northwest at mouth of South Sweeper Creek (6 of 6 photos south to north).

SA 80, STEAM PLANT NO. 4

Photo #68: SA 80, Steam Plant No. 4, view west of wells and site.

Photo #69: SA 80, Steam Plant No. 4, view east of well SP4-2 with a cracked monument lid.

SOUTH OF RUNWAY 18-36

Photo #70: South of Runway 18-36, overview of product recovery trench sumps looking north.

Photo #71: South of Runway 18-36, close-up of well Z4-2.

Photo #72: South of Runway 18-36, close-up of well E-209.

Photo #73: South of Runway 18-36, view north of well 02-231 with South Sweeper Creek on left.

Photo #74: South of Runway 18-36, view of well E-217.

Photo #75: South of Runway 18-36, shoreline inspection of eastern shore of South Sweeper Creek adjacent to site, view northwest of mouth of South Sweeper Creek with Main Road Pipeline in distance (1 of 17 photos south to north).

Photo #76: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view northwest towards Main Road pipeline and bridge, and boom 6 (2 of 17 photos south to north).

Photo #77: South of Runway 18-36, shoreline inspection, view northwest closer to Main Road bridge at boom 6 (3 of 17 photos south to north).

Photo #78: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view northwest of shoreline under Main Road bridge, iron staining in foreground (4 of 17 photos south to north).

Photo #79: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view northwest with from beneath Main Road bridge (5 of 17 photos south to north), boom 10 in background left.

Photo #80: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north toward Moffett Road bridge (6 of 17 photos south to north).

Photo #81: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north near Moffett Road bridge (7 of 17 photos south to north).

Photo #82: South of Runway 18-36, shoreline inspection of South Sweeper Creek, area of oil coated rocks approximately 4 feet by 2 feet just past Moffett Road bridge (8 of 17 photos south to north).

Photo #83: South of Runway 18-36, shoreline inspection of South Sweeper Creek, view north of Moffett Road bridge (9 of 17 photos south to north).

Photo #84: South of Runway 18-36, shoreline inspection view north of Moffett Road bridge, iron staining on shoreline in foreground (10 of 17 photos south to north).

Photo #85: South of Runway 18-36, shoreline inspection, sheen in sediment downgradient of recovery trench (11 of 17 photos south to north).

Photo #86: South of Runway 18-36, shoreline inspection north side of site, view north (12 of 17 photos south to north).

Photo #87: South of Runway 18-36, shoreline inspection, view north of bulkhead north of site (13 of 17 photos south to north).

Photo #88: South of Runway 18-36, shoreline inspection, view north from bulkhead with orange West Canal discharge pipe in distance (14 of 17 photos south to north).

Photo #89: South of Runway 18-36, shoreline inspection, view north of West Canal discharge pipes (15 of 17 photos south to north).

Photo #90: South of Runway 18-36, shoreline inspection view of petroleum sheen in the shoreline sediment north of site near trestle (16 of 17 photos south to north).

Photo #91: South of Runway 18-36, shoreline inspection, view north at end of inspection at trestle (17 of 17 photos south to north).

Photo #92: South of Runway 18-36, shoreline sediment sample location NSWSD-2S.

Photo #93: South of Runway 18-36, shoreline sediment sample location NSWSD-4S.

Photo #94: South of Runway 18-36, shoreline sediment sample location NSWSD-5S with sheen on water.

Photo #95: South of Runway 18-36, shoreline surface water sample location NSWSD-7 at mouth of South Sweeper Creek, view southeast.

Photo #96: South of Runway 18-36, shoreline surface water sample location NSWSD-8 at trestle north of site, view northwest.

SWMU 14, OLD PESTICIDE DISPOSAL AREA

Photo #97: SWMU 14, Old Pesticide Disposal Area, view north of monitoring well 14-5 and site overview.

SWMU 17, POWER PLANT NO. 3

Photo #98: SWMU 17, Power Plant No. 3, equipment staging area, view northwest of old AST.

Photo #99: SWMU 17, Power Plant No. 3, view south of well 05-735 view north with Power Plant and crushed drums in background.

SWMU 58/SA 73, HEATING PLANT NO. 6

Photo #100: SWMU 58/SA 73, Heating Plant No. 6, well 12-114 with a broken collar.

Photo #101: SWMU 58/SA 73, Heating Plant No. 6, shoreline inspection of perennial stream south end, view north with electrical pole (photo 1 of 3). Site is in background.

Photo #102: SWMU 58/SA 73, Heating Plant No. 6, shoreline inspection of perennial stream bed upstream, view south with the electrical pole in background (photo 2 of 3). No flowing water was observed in stream.

Photo #103: SWMU 58/SA 73, Heating Plant No. 6, shoreline inspection, view south at top of ravine looking toward Clam Lagoon, with 12-601(photo 3 of 3).

SWMU 60, TANK FARM A

Photo #104: SWMU 60, Tank Farm A, view northeast, site overview with well 653 and Moffett Road in background. Concrete pad has heaved upward.

Photo #105: SWMU 60, Tank Farm A, downward view of well 650. Bentonite has heaved upward around casing.

Photo #106: SWMU 60, Tank Farm A, view of well 652 looking toward well 651 where worker is standing.

Photo #107: SWMU 60, Tank Farm A, view northeast of well LCSA.

Photo #108: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek at Main Road pipeline crossing at mouth of creek, looking northwest (1 of 12 photos south to north).

Photo #109: SWMU 60, Tank Farm A, shoreline inspection of western shore of South Sweeper Creek, view northwest beneath Main Road bridge toward boom 10 (2 of 12 photos south to north).

Photo #110: SWMU 60, Tank Farm A, shoreline inspection, view west at the south end of the inspection toward boom 10 and culvert (3 of 12 photos south to north).

Photo #111: SWMU 60, Tank Farm A, shoreline inspection, view southwest of surface water sample location 852 (4 of 12 photos south to north).

Photo #112: SWMU 60, Tank Farm A, shoreline inspection, view southwest of sediment sample location 852S (5 of 12 photos south to north).

Photo #113: SWMU 60, Tank Farm A, shoreline inspection, view north of sediment sample location 852S (6 of 12 photos south to north).

Photo #114: SWMU 60, Tank Farm A, shoreline inspection, view southwest of culvert and boom 10 with iron staining and sheen behind boom (7 of 12 photos south to north).

Photo #115: SWMU 60, Tank Farm A, shoreline inspection, petroleum seep with sheen behind boom 10 (8 of 12 photos south to north).

Photo #116: SWMU 60, Tank Farm A, shoreline inspection, view southwest of Boom 10 with oily staining (9 of 12 photos south to north).

Photo #117: SWMU 60, Tank Farm A, shoreline inspection, view northeast upstream from boom 10, during low-tide conditions (10 of 12 photos south to north).

Photo #118: SWMU 60, Tank Farm A, shoreline inspection, view west, collapsed culvert north and east of boom 10 seep (11 of 12 photos south to north).

Photo #119: SWMU 60, Tank Farm A, shoreline inspection, view north end of inspection area northeast side of lagoon (12 of 12 photos south to north).

SWMU 61, TANK FARM B

Photo #120: SWMU 61, Tank Farm B, site overview, view northeast.

Photo #121: SWMU 61, Tank Farm B, looking down on North Sweeper Creek and sampling teams view northeast. Team is at surface water/sediment sample location NL-D-04.

Photo #122: SWMU 61, Tank Farm B, well 14-113 and North Sweeper Creek sample location NL-04, view east toward NORPAC Hill.

Photo #123: SWMU 61, Tank Farm B, well TFB-MW-4B view northeast toward North Sweeper Creek.

Photo #124: SWMU 61, Tank Farm B, view south of well 14-210.

Photo #125: SWMU 61, Tank Farm B, view southeast of North Sweeper Creek with surface water/sediment sample location NL-D-04, north end of shoreline inspection (1 of 5 photos north to south).

Photo #126: SWMU 61, Tank Farm B, shoreline inspection, view southeast from surface water/sediment sample location NL-D-04 (2 of 5 photos north to south).

Photo #127: SWMU 61, Tank Farm B, view northeast of surface water/sediment sample location NL-04, North Sweeper Creek (3 of 5 photos north to south).

Photo #128: SWMU 61, Tank Farm B, view northeast of sample location NL-D-04, North Sweeper Creek (4 of 5 photos north to south).

Photo #129: SWMU 61, Tank Farm B, shoreline inspection, view southeast from surface water/sediment location NL-04 toward fuel line (5 of 5 photos north to south).

SWMU 62, NEW HOUSING FUEL LEAK

Photo #130: SWMU 62, New Housing Fuel Leak, Sandy Cove, view southeast.

Photo #131: SWMU 62, New Housing Fuel Leak, Sandy Cove Housing well MW-107-1.

Photo #132: SWMU 62, New Housing Fuel Leak, Eagle Bay Housing, well 03-778, view southeast.

Photo #133: SWMU 62, New Housing Fuel Leak Area, Sandy Cove Housing wells MRP-MW2 and MRP-MW-3, view southeast.

Photo #134: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view north from north of Former Power Plant boom 9/12 (1 of 16 photos from south to north).

Photo #135: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view south at culverts upstream of boom 9/12 (2 of 16 photos from north to south).

Photo #136: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, further north along shoreline (3 of 16 photos from north to south).

Photo #137: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view north of high water levels (4 of 16 photos from north to south).

Photo #138: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view north (5 of 16 from north to south).

Photo #139: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view north toward boom 3 in distance (6 of 16 from north to south).

Photo #140: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view north at surface water/sediment sample NL-09 and boom 3 (7 of 16 photos from north to south).

Photo #141: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, sediment sample NL-09 (8 of 16 photos from north to south).

Photo #142: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, surface water/sediment sample NL-09, location looking west (9 of 16 photos from north to south).

Photo #143: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view north toward booms 3and 8, downgradient from product recovery trench and seep, (10 of 16 photos from north to south).

Photo #144: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view west of boom 3 with petroleum sheen from seep (11 of 16 photos from north to south).

Photo #145: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view north of boom 8, shoreline petroleum seep, sheen, and oily sediments (12 of 16 photos from north to south).

Photo #146: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view of pooled product at boom 8 (13 of 16 photos from north to south).

Photo #147: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view of petroleum shoreline seep at boom 8 (14 of 16 photos from north to south).

Photo #148: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view north upstream of boom 3 (15 of 16 photos from north to south).

Photo #149: SWMU 62, New Housing Fuel Leak Area, Eagle Bay Housing, East Canal shoreline inspection, view west from boom 8 to boom 2 around culverts, heavy petroleum seep, sheen, iron staining, and oily sediments, (16 of 16 photos from north to south).

TANKER SHED UST-42494

Photo #150: Tanker Shed UST-42494, view west of site, well 04-175 in foreground.

Photo #151: Tanker Shed UST-42494, view north of well 04-310, broken monument and lid.

Photo #152: Tanker Shed UST-42494, close-up view of well TS-03.

APPENDIX J

SUMMARY OF FREE PRODUCT RECOVERY AT ADAK ISLAND FORMER NAVAL COMPLEX

Free product recovery activities were performed at some of the LTM sites during the 2011/2012 contract year. Wells were selected for free product recovery partly 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 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. A summary of the free product activities conducted at the SWMU 62, New Housing Fuel Leak area during the 2011/2012 contract year (October 2011 through September 2012) is presented in the Remedial Action Summary Report for Free Product Recovery, Adak, Alaska, November 26, 2013 (Navy 2012f).

Specific wells at additional sites were identified for free product recovery on the basis of 2010 and 2011 LTM field observations. These activities were conducted concurrently with free product recovery activities at SWMU 62, New Housing Fuel Leak Area. Free product activities were conducted at 13 additional wells located at the following four sites:

- NMCB
- SA 80, Steam Plant 4
- SWMU 58/SA 73, Heating Plant 6
- SWMU 60, Tank Farm A

Corrected groundwater elevations, product thicknesses, 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 2011 through September 2012. Tables J-4 and J-5 list the observed monthly product thicknesses and volumes of recovered product, respectively, for the wells at other sites.

Table J-1. Corrected Groundwater Elevation Summary from October 2011 through September 2012, SMWU 62, New Housing Fuel Leak Area

Monitoring Well	Well Elevation (ft above MLLW)	Total Depth of Well (ft bgs)	Oct-11 (ft above MLLW)	Nov-11 (ft above MLLW)	Dec-11 (ft above MLLW)	Jan-12 (ft above MLLW)	Feb-12 (ft above MLLW)	Mar-12 (ft above MLLW)	Apr-12 (ft above MLLW)	May-12 (ft above MLLW)	Jun-12 (ft above MLLW)	Jul-12 (ft above MLLW)	Aug-12 (ft above MLLW)	Sep-12 (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	3.09	NM	5.48	NM	NM	NM	5.65	NM	3.88	3.60	NM	3.47	3.09	5.65	4.20
03-102	17.27	18.5	2.71	NM	5.02	NM	NM	NM	4.96	NM	3.38	3.15	NM	2.98	2.71	5.02	3.70
03-518	30.35	32	3.51	NM	5.80	NM	NM	NM	6.15	NM	4.42	4.07	NM	3.81	3.51	6.15	4.63
HMW-303-2	30.55	32.1	NM	NM	NM	NM	NM	NM	5.97	NM	4.13	2.81	NM	3.57	2.81	5.97	4.12
HMW-303-3	31.04	31.2	NM	NM	NM	NM	NM	NM	6.39	NM	4.34	3.99	NM	3.70	3.70	6.39	4.60
HMW-303-9	29.54	35	3.09	NM	5.15	NM	NM	NM	5.24	NM	3.56	3.31	NM	3.16	3.09	5.24	3.92
HMW-303-11	31.64	32.5	3.33	NM	5.60	NM	NM	NM	5.87	NM	4.18	3.86	NM	3.62	3.33	5.87	4.41
MRP-MW3	27.25	10	23.47	NM	25.22	NM	NM	NM	23.31	NM	19.92	19.53	NM	19.07	19.07	25.22	21.75
MW-15	20.96	22	2.81	NM	5.09	NM	NM	NM	5.08	NM	3.52	3.27	NM	3.03	2.81	5.09	3.80
MW-303-8	27.39	30	4.20	NM	6.95	NM	NM	NM	Disc	Disc	Disc	Disc	Disc	Disc	4.20	6.95	5.57
MW-303-10	27.68	31	4.14	NM	6.65	NM	NM	NM	Disc	Disc	Disc	Disc	Disc	Disc	4.14	6.65	5.40
MW-303-12	25.80	35.5	3.95	NM	6.86	NM	NM	NM	6.22	NM	5.11	4.68	NM	4.28	3.95	6.86	5.18
MW-303-14	28.10	29.2	NM	NM	NM	NM	NM	NM	8.55	NM	6.54	6.04	NM	5.53	5.53	8.55	6.67
RW-303-4	27.89	38	5.33	NM	8.16	NM	NM	NM	8.56	NM	6.47	6.07	NM	5.67	5.33	8.56	6.71
RW-303-7	26.61	38	NM	NM	NM	NM	NM	NM	8.67	NM	4.64	4.26	NM	3.75	3.75	8.67	5.33
RW-303-13	8.98	19.4	1.94	NM	3.78	NM	NM	NM	3.30	NM	2.11	2.18	NM	2.26	1.94	3.78	2.60
RW-303-15	31.26	34.1	3.25	NM	5.52	NM	NM	NM	5.82	NM	4.09	3.76	NM	3.53	3.25	5.82	4.33
SWMU62-R1[1]	6.52	10.30	-0.69	NM	0.90	NM	NM	NM	0.47	NM	-0.46	-0.45	NM	-0.54	-0.69	0.90	-0.13
SWMU62-R2[1]	6.80	10.34	-0.22	NM	1.46	NM	NM	NM	1.00	NM	-0.02	-0.02	NM	-0.06	-0.22	1.46	0.36
SWMU62-R3[1]	7.47	10.48	0.68	NM	2.46	NM	NM	NM	1.99	NM	0.83	0.89	NM	0.88	0.68	2.46	1.29
SWMU62-R4[1]	8.04	10.19	1.45	NM	3.25	NM	NM	NM	2.74	NM	1.59	1.64	NM	1.65	1.45	3.25	2.05
SWMU62-R5[1]	8.97	9.30	2.63	NM	4.43	NM	NM	NM	3.93	NM	2.76	2.84	NM	2.83	2.63	4.43	3.24
SWMU62-R6[1]	9.52	9.90	2.77	NM	4.56	NM	NM	NM	4.06	NM	2.90	2.97	NM	2.97	2.77	4.56	3.37
Average Elevation	NA	NA	3.76	NM	5.91	NM	NM	NM	5.90	NM	4.18	3.93	NM	3.77	NA	NA	NA

Notes:
[1] recovery sumps
Groundwater elevations were corrected for free product if present.
Disc - discontinued
ft – feet
NA – not applicable
NM – not measured

Table J-2. Product Thickness Summary from October 2011 through September 2012, SMWU 62, New Housing Fuel Leak Area

Monitoring Well	Oct-11 (feet)	Nov-11 (feet)	Dec-11 (feet)	Jan-12 (feet)	Feb-12 (feet)	Mar-12 (feet)	Apr-12 (feet)	May-12 (feet)	Jun-12 (feet)	Jul-12 (feet)	Aug-12 (feet)	Sep-12 (feet)	Minimum Product Thickness (feet)	Maximum Product Thickness (feet)	Average Product Thickness (feet)	Total Months Product Found
03-101	0	NM	0	NM	NM	NM	**0.18**	NM	**0.08**	0	NM	0	0	**0.18**	**0.04**	**2**
03-102	0	NM	**0.38**	NM	NM	NM	**0.47**	NM	**0.05**	0	NM	0	0	**0.47**	**0.15**	**3**
03-518	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
HMW-303-2	NM	NM	NM	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
HMW-303-3	NM	NM	NM	NM	NM	NM	0	NM	**0.55**	0	NM	0	0	**0.55**	**0.14**	**1**
HMW-303-9	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	**0.04**	0	NM	0	0	**0.04**	**0.01**	**1**
MRP-MW3	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
MW-15	**0.57**	NM	0	NM	NM	NM	**0.51**	NM	**0.27**	0	NM	0	0	**0.57**	**0.23**	**3**
MW-303-8	0	NM	**0.10**	NM	NM	NM	Disc	Disc	Disc	Disc	Disc	Disc	0	**0.10**	**0.05**	**1**
MW-303-10	0	NM	0	NM	NM	NM	Disc	Disc	Disc	Disc	Disc	Disc	0	0	0	0
MW-303-12	0	NM	**0.01**	NM	NM	NM	0	NM	0	0	NM	0	0	**0.01**	0	**1**
MW-303-14	NM	NM	NM	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
RW-303-4	0	NM	**0.04**	NM	NM	NM	0	NM	0	0	NM	0	0	**0.04**	**0.01**	**1**
RW-303-7	NM	NM	NM	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
RW-303-13	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	**0.16**	NM	**0.29**	0	NM	0	0	**0.29**	**0.07**	**2**
SWMU62-R1[1]	0	NM	0	NM	NM	NM	0	NM	0	0	NM	**0.03**	0	**0.03**	**0.01**	**1**
SWMU62-R2[1]	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
SWMU62-R3[1]	**0.10**	NM	**0.05**	NM	NM	NM	**0.03**	NM	**0.16**	**0.13**	NM	**0.10**	**0.03**	**0.16**	**0.09**	**6**
SWMU62-R4[1]	**0.07**	NM	**0.06**	NM	NM	NM	**0.01**	NM	**0.07**	**0.09**	NM	**0.09**	**0.01**	**0.09**	**0.06**	**6**
SWMU62-R5[1]	**0.05**	NM	**0.01**	NM	NM	NM	0	NM	0	**0.02**	NM	**0.04**	0	**0.05**	**0.01**	**4**
SWMU62-R6[1]	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
Average Product Thickness	**0.04**	NM	**0.03**	NM	NM	NM	**0.06**	NM	**0.07**	**0.01**	NM	**0.01**	NA	NA	NA	NA

Notes:
[1] recovery sumps
Bolded well IDs indicate monitoring wells that have had product observed during the reporting period.
Disc - discontinued
NA – not applicable
NM – not measured

Table J-3. Recovered Product Volume Summary from October 2011 through September 2012, SMWU 62, New Housing Fuel Leak Area

Monitoring Well	Oct-11 (gallons)	Nov-11 (gallons)	Dec-11 (gallons)	Jan-12 (gallons)	Feb-12 (gallons)	Mar-12 (gallons)	Apr-12 (gallons)	May-12 (gallon)	Jun-12 (gallon)	Jul-12 (gallons)	Aug-12 (gallons)	Sep-12 (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	NM	NM	NM	**0.32**	NM	**0.10**	0	NM	0	0	**0.32**	**0.07**	**0.42**
03-102	0	NM	**0.15**	NM	NM	NM	**0.60**	NM	**0.03**	0	NM	0	0	**0.60**	**0.13**	**0.78**
03-518	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
HMW-303-2	NM	NM	NM	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
HMW-303-3	NM	NM	NM	NM	NM	NM	0	NM	**0.11**	0	NM	0	0	**0.11**	**0.03**	**0.11**
HMW-303-9	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
MRP-MW3	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
MW-15	**0.10**	NM	0	NM	NM	NM	0	NM	**0.03**	0	NM	0	0	**0.10**	**0.02**	**0.13**
MW-303-8	0	NM	**0.01**	NM	NM	NM	Disc	Disc	Disc	Disc	Disc	Disc	0	**0.01**	**0.01**	**0.01**
MW-303-10	0	NM	0	NM	NM	NM	Disc	Disc	Disc	Disc	Disc	Disc	0	0	0	0
MW-303-12	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
MW-303-14	NM	NM	NM	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-303-7	NM	NM	NM	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
RW-303-13	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	**0.47**	NM	**0.37**	0	NM	0	0	**0.47**	**0.14**	**0.84**
SWMU62-R1[1]	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
SWMU62-R2[1]	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
SWMU62-R3[1]	**0.96**	NM	**0.02**	NM	NM	NM	**0.01**	NM	**0.82**	**0.31**	NM	**0.37**	**0.01**	**0.96**	**0.42**	**2.49**
SWMU62-R4[1]	**0.82**	NM	**0.02**	NM	NM	NM	0	NM	**0.02**	**0.13**	NM	**0.43**	0	**0.82**	**0.24**	**1.42**
SWMU62-R5[1]	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
SWMU62-R6[1]	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
Total Volume of Recovered Product (gallons)	**1.88**	NM	**0.20**	NM	NM	NM	**1.40**	NM	**1.48**	**0.44**	NM	**0.80**	NA	NA	NA	**6.20**
6-Month Moving Average	**1.61**	**1.31**	**1.19**	**1.13**	**0.74**	**0.35**	**0.27**	**0.27**	**0.48**	**0.55**	**0.55**	**0.69**	NA	NA	NA	NA

Notes:
[1] recovery sumps
Bolded well IDs indicate monitoring wells that have had product recovered during the reporting period.
Disc - discontinued
NA – not applicable
NM – not measured

Table J-4. Product Thickness Summary from October 2011 through September 2012, Additional Sites

Monitoring Well	Oct-11 (feet)	Nov-11 (feet)	Dec-11 (feet)	Jan-12 (feet)	Feb-12 (feet)	Mar-12 (feet)	Apr-12 (feet)	May-12 (feet)	Jun-12 (feet)	Jul-12 (feet)	Aug-12 (feet)	Sep-12 (feet)	Minimum Product Thickness (feet)	Maximum Product Thickness (feet)	Average Product Thickness (feet)	Total Months Product Found
NMCB Expanded Area																
02-300	**0.03**	NM	0	NM	NM	NM	**0.14**	NM	**0.04**	**0.98**	NM	**0.14**	0	**0.98**	**0.13**	**5**
02-463	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	**0**
02-497	**0.01**	NM	0	NM	NM	NM	0	NM	0	**0.50**	NM	**0.12**	0	**0.50**	**0.06**	**3**
02-815	**0.02**	NM	0	NM	NM	NM	**0.03**	NM	0	**0.13**	NM	**0.02**	0	**0.13**	**0.02**	**4**
02-818	**0.03**	NM	0	NM	NM	NM	**0.03**	NM	0	**0.31**	NM	**0.03**	0	**0.31**	**0.04**	**4**
NMCB-07	**0.10**	NM	**0.07**	NM	NM	NM	**0.12**	NM	0	**0.56**	NM	**0.44**	0	**0.56**	**0.14**	**5**
NMCB-10	**0.04**	NM	**0.02**	NM	NM	NM	0	NM	0	**0.34**	NM	**0.16**	0	**0.34**	**0.06**	4
SA 80, Steam Plant 4																
04-157	**0.01**	NM	**0.76**	NM	NM	NM	**1.14**	NM	**0.22**	**0.03**	NM	**0.03**	**0.01**	**1.14**	**0.22**	**6**
04-158	**0.02**	NM	**0.13**	NM	NM	NM	**0.41**	NM	**0.46**	**0.02**	NM	0	0	**0.46**	**0.10**	**5**
04-173	0	NM	0	NM	NM	NM	0	NM	**0.04**	**0.02**	NM	0	0	**0.04**	**0.01**	**2**
SWMU 58/SA 73, Heating Plant 6																
12-203	0	NM	0	NM	NM	NM	**0.07**	NM	**0.06**	**0.02**	NM	0	0	**0.07**	**0.02**	**3**
SWMU 60, Tank Farm A																
652	**0.01**	NM	**0.02**	NM	NM	NM	**0.08**	NM	0	**0.02**	NM	0	0	**0.08**	**0.01**	**4**
653	**0.56**	NM	**0.13**	NM	NM	NM	0	NM	0	0	NM	0	0	**0.56**	**0.07**	**2**

Notes:
Bolded well IDs indicate monitoring wells that have had product observed during the reporting period.
NA – not applicable
NM – not measured

Table J-5. Recovered Product Volume Summary from October 2011 through September 2012, Other Sites

Monitoring Well	Oct-11 (gallons)	Nov-11 (gallons)	Dec-11 (gallons)	Jan-12 (gallons)	Feb-12 (gallons)	Mar-12 (gallons)	Apr-12 (gallons)	May-12 (gallon)	Jun-12 (gallon)	Jul-12 (gallons)	Aug-12 (gallons)	Sep-12 (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	NM	0	NM	NM	NM	0	NM	0	**0.13**	NM	**0.02**	0	**0.13**	**0.02**	**0.15**
02-463	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
02-497	0	NM	0	NM	NM	NM	0	NM	0	**0.16**	NM	0	0	**0.06**	**0.01**	**0.06**
02-815	0	NM	0	NM	NM	NM	0	NM	0	**0.07**	NM	0	0	**0.07**	**0.01**	**0.07**
02-818	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
NMCB-07	**0.14**	NM	**0.02**	NM	NM	NM	**0.08**	NM	0	**0.25**	NM	**0.02**	0	**0.25**	**0.06**	**0.51**
NMCB-10	0	NM	0	NM	NM	NM	0	NM	0	0	NM	**0.03**	0	**0.03**	0	**0.03**
Total Volume of Recovered Product (gallons)	**0.14**	NA	**0.02**	NA	NA	NA	**0.08**	NA	0	**0.61**	NA	**0.07**	NA	NA	NA	**0.82**
SA 80, Steam Plant 4																
04-157	0	NM	**0.48**	NM	NM	NM	**0.62**	NM	**0.39**	**0.01**	NM	0	0	**0.62**	**0.15**	**1.50**
04-158	0	NM	**0.08**	NM	NM	NM	0	NM	**0.48**	**0.03**	NM	0	0	**0.48**	**0.06**	**0.59**
04-173	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
Total Volume of Recovered Product (gallons)	0	NA	**0.56**	NA	NA	NA	**0.62**	NA	**0.87**	**0.04**	NA	0	NA	NA	NA	**2.09**
SWMU 58/SA 73, Heating Plant 6																
12-203	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
Total Volume of Recovered Product (gallons)	0	NA	0	NA	NA	NA	0	NA	0	0	NA	0	NA	NA	NA	0
SWMU 60, Tank Farm A																
652	0	NM	0	NM	NM	NM	0	NM	0	0	NM	0	0	0	0	0
653	**0.18**	NM	**0.02**	NM	NM	NM	0	NM	0	0	NM	0	0	**0.18**	**0.03**	**0.20**
Total Volume of Recovered Product (gallons)	**0.18**	NM	**0.02**	NM	NM	NM	0	NM	0	0	NM	0	NA	NA	NA	**0.20**

Notes:
Bolded well IDs indicate monitoring wells that have had product recovered during the reporting period.
NA – not applicable
NM – not measured

APPENDIX K

TIDE CHARTS

Text View Tides MAP

ProTIDES

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51.8633° N, 176.6317° W

	Dif	Height		Dif	Height		Dif	Height		Dif	Height		Dif	Sun	Moon
8/1	N/A	H	4'2" 2:35AM	5'0"	L	-0'10" 11:36AM	4'8"	-	- -	-	-	- -	-	07:10-10:34	10:02-07:01
8/2	4'8"	H	3'9" 3:34AM	4'4"	L	-0'6" 12:26PM	3'5"	H	2'10" 9:08PM	0'0"	L	2'9" 11:32PM	0'6"	07:11-10:32	10:27-08:19
8/3	0'6"	H	3'4" 4:43AM	3'6"	L	-0'1" 1:13PM	3'0"	H	2'10" 9:11PM	0'5"	-	- -	-	07:13-10:31	10:48-09:35
8/4	0'5"	L	2'5" 1:36AM	0'5"	H	2'10" 6:07AM	2'7"	L	0'3" 1:59PM	2'8"	H	2'11" 9:27PM	1'0"	07:14-10:29	11:09-10:49
8/5	1'0"	L	1'11" 3:04AM	0'6"	H	2'6" 7:46AM	1'9"	L	0'9" 2:42PM	2'3"	H	3'0" 9:47PM	1'6"	07:16-10:27	11:29-12:00
8/6	1'6"	L	1'5" 4:10AM	0'9"	H	2'3" 9:30AM	1'1"	L	1'2" 3:23PM	1'11"	H	3'1" 10:07PM	2'1"	07:17-10:25	11:50-01:09
8/7	2'1"	L	1'0" 5:04AM	1'2"	H	2'2" 11:11AM	0'7"	L	1'7" 3:58PM	1'7"	H	3'2" 10:27PM	2'7"	07:19-10:23	12:00-02:17
8/8	2'7"	L	0'7" 5:51AM	1'7"	H	2'3" 12:49PM	0'3"	L	2'0" 4:26PM	1'3"	H	3'3" 10:47PM	3'0"	07:20-10:21	12:13-03:22
8/9	3'0"	L	0'3" 6:35AM	2'0"	H	2'4" 2:34PM	0'0"	L	2'3" 4:37PM	1'1"	H	3'5" 11:07PM	3'4"	07:22-10:20	12:40-04:25
8/10	3'4"	L	0'0" 7:17AM	3'5"	H	3'6" 11:27PM	3'8"	-	- -	-	-	- -	-	07:24-10:18	01:12-05:25
8/11	3'8"	L	-0'1" 7:59AM	3'9"	H	3'7" 11:49PM	3'10"	-	- -	-	-	- -	-	07:25-10:15	01:50-06:19
8/12	3'10"	L	-0'2" 8:41AM	3'11"	-	- -	-	-	- -	-	-	- -	-	07:27-10:14	02:36-07:06
8/13	3'11"	H	3'8" 12:15AM	4'0"	L	-0'3" 9:23AM	4'0"	-	- -	-	-	- -	-	07:29-10:12	03:30-07:47
8/14	4'0"	H	3'9" 12:44AM	4'0"	L	-0'3" 10:03AM	4'0"	-	- -	-	-	- -	-	07:30-10:10	04:31-08:22
8/15	4'0"	H	3'8" 1:17AM	3'11"	L	-0'2" 10:42AM	3'9"	-	- -	-	-	- -	-	07:32-10:08	05:39-08:51
8/16	3'9"	H	3'7" 1:57AM	3'8"	L	-0'0" 11:20AM	3'5"	-	- -	-	-	- -	-	07:33-10:06	06:50-09:17
8/17	3'5"	H	3'4" 2:49AM	3'2"	L	0'1" 11:56AM	2'10"	-	- -	-	-	- -	-	07:35-10:04	08:04-09:40
8/18	2'10"	H	3'0" 3:59AM	2'7"	L	0'5" 12:32PM	2'1"	H	2'6" 8:35PM	0'3"	-	- -	-	07:37-10:01	09:20-10:02
8/19	0'3"	L	2'3" 12:40AM	0'5"	H	2'8" 5:35AM	1'10"	L	0'9" 1:07PM	1'9"	H	2'7" 8:18PM	0'10"	07:38-09:59	10:37-10:24
8/20	0'10"	L	1'9" 2:07AM	0'8"	H	2'5" 7:26AM	1'2"	L	1'3" 1:41PM	1'7"	H	2'10" 8:21PM	1'8"	07:40-09:57	11:55-10:48
8/21	1'8"	L	1'2" 3:11AM	1'2"	H	2'4" 9:18AM	0'8"	L	1'8" 2:14PM	1'6"	H	3'2" 8:37PM	2'7"	07:41-09:55	01:14-11:16
8/22	2'7"	L	0'6" 4:07AM	1'9"	H	2'4" 11:02AM	0'3"	L	2'0" 2:45PM	1'5"	H	3'6" 9:03PM	3'6"	07:43-09:53	02:33-11:49
8/23	3'6"	L	0'0" 5:01AM	2'5"	H	2'5" 12:40PM	0'1"	L	2'4" 3:13PM	1'5"	H	3'9" 9:38PM	4'3"	07:45-09:51	03:49-12:00
8/24	4'3"	L	-0'5" 5:54AM	3'0"	H	2'6" 2:17PM	0'0"	L	2'6" 3:33PM	1'5"	H	4'0" 10:19PM	4'9"	07:46-09:49	04:59-12:29
8/25	4'9"	L	-0'8" 6:47AM	4'10"	H	4'2" 11:06PM	5'0"	-	- -	-	-	- -	-	07:48-09:47	06:00-01:20
8/26	5'0"	L	-0'9" 7:40AM	5'0"	H	4'2" 11:56PM	4'11"	-	- -	-	-	- -	-	07:50-09:44	06:50-02:20
8/27	4'11"	L	-0'9" 8:34AM	4'9"	-	- -	-	-	- -	-	-	- -	-	07:51-09:42	07:30-03:29
8/28	4'9"	H	4'0" 12:51AM	4'7"	L	-0'6" 9:27AM	3'2"	H	2'7" 6:21PM	0	L	2'7" 7:04PM	1'1"	07:53-09:40	08:02-04:44
8/29	1'1"	H	3'9" 1:49AM	4'0"	L	-0'3" 10:19AM	2'10"	H	2'7" 6:29PM	0'1"	L	2'6" 8:58PM	0'11"	07:54-09:38	08:29-06:00
8/30	0'11"	H	3'5" 2:55AM	3'3"	L	0'1" 11:10AM	2'5"	H	2'7" 6:49PM	0'3"	L	2'3" 10:40PM	0'9"	07:56-09:36	08:52-07:15
8/31	0'9"	H	3'0" 4:11AM	2'6"	L	0'6" 12:00PM	2'0"	H	2'7" 7:11PM	N/A	-	- -	-	07:58-09:33	09:13-08:29

Text View Tides MAP

ProTIDES

Home > Alaska Tides > Adak Island > Sweeper Cove

<< < Sep, 2012 > >>

51.8633° N, 176.6317° W

	Dif	Height			Dif	Height			Dif	Height			Dif	Height			Dif	Sun	Moon
9/1	N/A	L	1'11"	12:12AM	0'9"	H	2'9"	5:43AM	1'9"	L	0'11"	12:50PM	1'8"	H	2'8"	7:33PM	1'0"	07:59-09:31	09:33-09:41
9/2	1'0"	L	1'7"	1:28AM	0'11"	H	2'6"	7:24AM	1'2"	L	1'4"	1:40PM	1'3"	H	2'8"	7:55PM	1'6"	08:01-09:29	09:54-10:51
9/3	1'6"	L	1'2"	2:29AM	1'3"	H	2'6"	9:04AM	0'9"	L	1'9"	2:28PM	1'0"	H	2'9"	8:16PM	1'11"	08:02-09:27	10:17-12:00
9/4	1'11"	L	0'10"	3:21AM	1'9"	H	2'7"	10:34AM	0'5"	L	2'1"	3:14PM	0'9"	H	2'10"	8:37PM	2'4"	08:04-09:24	10:42-01:06
9/5	2'4"	L	0'6"	4:07AM	2'2"	H	2'8"	11:53AM	0'3"	L	2'4"	3:56PM	0'7"	H	3'0"	8:59PM	2'8"	08:06-09:22	11:12-02:11
9/6	2'8"	L	0'3"	4:51AM	2'6"	H	2'9"	1:04PM	0'2"	L	2'7"	4:30PM	0'6"	H	3'1"	9:24PM	3'0"	08:07-09:20	11:48-03:12
9/7	3'0"	L	0'1"	5:34AM	2'8"	H	2'10"	2:14PM	0'0"	L	2'9"	4:52PM	0'5"	H	3'2"	9:52PM	3'2"	08:09-09:17	12:00-04:08
9/8	3'2"	L	0'0"	6:16AM	2'10"	H	2'10"	3:33PM	0'0"	L	2'10"	4:55PM	0'6"	H	3'4"	10:23PM	3'4"	08:11-09:15	12:30-04:58
9/9	3'4"	L	-0'0"	6:59AM	3'5"	H	3'4"	10:58PM	3'5"	-	-	-	-	-	-	-	-	08:12-09:13	01:20-05:41
9/10	3'5"	L	-0'0"	7:41AM	3'5"	H	3'5"	11:37PM	3'4"	-	-	-	-	-	-	-	-	08:14-09:10	02:17-06:18
9/11	3'4"	L	0'0"	8:22AM	3'3"	-	-	-	-	-	-	-	-	-	-	-	-	08:15-09:08	03:21-06:49
9/12	3'3"	H	3'4"	12:20AM	3'1"	L	0'2"	9:01AM	3'0"	-	-	-	-	-	-	-	-	08:17-09:06	04:30-07:17
9/13	3'0"	H	3'3"	1:12AM	2'9"	L	0'5"	9:40AM	1'11"	H	2'5"	6:08PM	0'0"	L	2'5"	8:10PM	0'7"	08:19-09:04	05:43-07:41
9/14	0'7"	H	3'0"	2:18AM	2'3"	L	0'9"	10:17AM	1'7"	H	2'4"	5:40PM	0'3"	L	2'1"	9:55PM	0'8"	08:20-09:01	06:58-08:04
9/15	0'8"	H	2'9"	3:42AM	1'8"	L	1'1"	10:55AM	1'4"	H	2'6"	5:33PM	0'9"	L	1'8"	11:19PM	0'11"	08:22-08:59	08:15-08:27
9/16	0'11"	H	2'7"	5:25AM	1'1"	L	1'6"	11:33AM	1'1"	H	2'8"	5:40PM	1'6"	-	-	-	-	08:24-08:56	09:35-08:51
9/17	1'6"	L	1'1"	12:30AM	1'5"	H	2'7"	7:15AM	0'7"	L	1'11"	12:13PM	1'0"	H	2'11"	5:59PM	2'4"	08:25-08:54	10:56-09:19
9/18	2'4"	L	0'6"	1:33AM	2'1"	H	2'8"	9:01AM	0'3"	L	2'4"	12:55PM	0'10"	H	3'3"	6:29PM	3'2"	08:27-08:52	12:17-09:51
9/19	3'2"	L	0'0"	2:32AM	2'9"	H	2'10"	10:33AM	0'2"	L	2'8"	1:41PM	0'10"	H	3'6"	7:09PM	3'11"	08:28-08:49	01:36-10:29
9/20	3'11"	L	-0'4"	3:29AM	3'5"	H	3'0"	11:49AM	0'1"	L	2'10"	2:32PM	0'10"	H	3'9"	7:57PM	4'5"	08:30-08:47	02:49-11:18
9/21	4'5"	L	-0'8"	4:24AM	3'9"	H	3'1"	12:50PM	0'1"	L	2'11"	3:27PM	0'10"	H	3'10"	8:51PM	4'8"	08:32-08:45	03:54-12:00
9/22	4'8"	L	-0'9"	5:19AM	3'11"	H	3'1"	1:40PM	0'1"	L	2'11"	4:26PM	0'11"	H	3'11"	9:49PM	4'8"	08:33-08:42	04:47-12:16
9/23	4'8"	L	-0'9"	6:13AM	3'10"	H	3'1"	2:23PM	0'2"	L	2'10"	5:29PM	0'11"	H	3'9"	10:50PM	4'4"	08:35-08:40	05:30-01:22
9/24	4'4"	L	-0'6"	7:06AM	3'6"	H	3'0"	3:00PM	0'3"	L	2'8"	6:36PM	0'11"	H	3'7"	11:55PM	3'9"	08:37-08:38	06:04-02:34
9/25	3'9"	L	-0'2"	7:58AM	3'1"	H	2'11"	3:34PM	0'6"	L	2'5"	7:47PM	0'10"	-	-	-	-	08:38-08:36	06:31-03:48
9/26	0'10"	H	3'3"	1:04AM	3'0"	L	0'3"	8:49AM	2'7"	H	2'10"	4:05PM	0'8"	L	2'1"	9:00PM	0'10"	08:40-08:33	06:55-05:02
9/27	0'10"	H	3'0"	2:22AM	2'2"	L	0'9"	9:39AM	2'0"	H	2'9"	4:33PM	1'0"	L	1'9"	10:12PM	0'11"	08:42-08:31	07:17-06:15
9/28	0'11"	H	2'8"	3:54AM	1'5"	L	1'3"	10:29AM	1'6"	H	2'9"	4:57PM	1'4"	L	1'5"	11:18PM	1'2"	08:43-08:29	07:38-07:26
9/29	1'2"	H	2'7"	5:40AM	0'9"	L	1'9"	11:21AM	1'0"	H	2'9"	5:17PM	1'8"	-	-	-	-	08:45-08:26	07:58-08:36
9/30	1'8"	L	1'0"	12:17AM	1'6"	H	2'7"	7:32AM	0'5"	L	2'2"	12:19PM	0'7"	H	2'9"	5:33PM	N/A	08:47-08:24	08:20-09:45

APPENDIX L

RESPONSE TO REGULATOR COMMENTS

Alaska Department of Environmental Conservation
Comments on the Draft 2012 Annual Groundwater Monitoring Report, OUA, Adak NAS, February 21, 2013
Commenter: Guy Warren (ADEC) and Meghan Dooley (ADEC) Comments Developed: May 15, 2013

Cmt. No.	Pg. & Line	Sec.	Comment/Recommendation	Navy Response April 22, 2013
1.	ES-2	ES	Revisions will be required on some of the site specific recommendations. While ADEC supports reducing the LTM monitoring frequency there are a few sites where we do not yet have adequate data to switch to every other year monitoring. T-1451, Area 303, and SWMU 60-62 are sites where continued annual monitoring may be appropriate. More detail is provided as individual comments (below). ADEC understands that these sites will be discussed at our upcoming meeting to finalize future monitoring requirements.	During the meeting on April 17, 2013, it was agreed that annual monitoring may be required at sites Former Power Plant Building T-1451, the newly added Area 303, and SWMU 60 Tank Farm A due to the continued or past observance of contamination at these sites. However, all of these sites are currently scheduled to be monitored in August/ September 2013 and the decision to continue or reduce monitoring frequency will be made based on the 2013 results.
2.		Figure 2-1	The area identified as "Ordnance Sites" in the legend is incorrectly identified. This is the Parcel 4 boundary. Please revise legend.	Change made.
3.	Page 2-5	Section 2.3	Please note that no sampling occurred at the landfills during the 2012 monitoring event. You should also document here or in the deviation section that surface water sampling at Roberts landfill was inadvertently not conducted due to incorrect recommendations being included in the final 2011 landfill report.	Page 2-5, line 2, added the following: "**Monitoring at landfill sites did not occur during 2012 due to a reduction in the monitoring frequency but will occur in 2013 as per the CMP, Revision 5.**" Page 5-1, line 22, added the following: "**Groundwater monitoring activities were not performed at SWMU 25, Roberts Landfill as per the recommendations in the 2011 Landfill Monitoring Report. Surface water monitoring also was not performed at SWMU 25, Roberts Landfill due to a misunderstanding between the Navy and ADEC re the reduction of monitoring frequency. Both groundwater and surface water monitoring at SWMU 25 will be**

Cmt. No.	Pg. & Line	Sec.	Comment/Recommendation	Navy Response April 22, 2013
				performed in 2013 during LTM activities as prescribed in the CMP, Revision 5."
4.	Page 2-35, Table 2-4	SWMU 15	Site closure for SWMU 15 is still pending until the PCB issue is resolved.	Table 2-2, removed asterisk from SWMU 15. Table 2-4 was changed to reflect closure is pending.
5.	Page 5, Line 10	5.0	ADEC finds it mystifying that the Navy and their contractor could not select one of the 9 new wells that were installed on site for sampling in place of 01-151. Especially in light of ADEC's concerns regarding scheduling sampling for the new wells at this site.	Well construction information for the newly installed wells at Building T-1451 was not available during the LTM activities to appropriately select a replacement well. These newly installed wells are scheduled to be sampled during the 2013 LTM activities.
6.	Page 7-7	7.6	We just installed 9 new wells and an enhanced attenuation zone at the petroleum seep at this site. We need to evaluate appropriate monitoring requirements once we have initial characterization data for these wells. I thought more frequent monitoring in this area would be appropriate to evaluate the effectiveness of the zone….not less frequent. Please revise recommendation to evaluate monitoring requirements once baseline data for the new wells is available. Area 303 is another site where annual monitoring has not occurred in several years so annual monitoring will be required at this site until baseline conditions have been established.	Monitoring at the 9 newly installed wells at Former Power Plant Building T-1451 and the ten newly installed wells at Area 303 will be conducted in 2013. The same monitoring that recently occurred at these two sites in April of this year will be again performed in August/ September, except for the 6 wells at Area 303 which were slated for one-time PCE sampling delineation. The monitoring requirements from the URS SAP for the additional new wells and additional analytical parameters for pre-existing wells at these sites will be added to the CMP and will occur in 2013.
7.	Page 8-7	8.6	ADEC concurs with recommendations to discontinue DRO sampling and to reduce monitoring frequency at this site.	The Navy will implement the recommendations.
8.	Page 9-11	9.6	A little confused on recommendations. Line 9 suggests that free product monitoring continue	Page 9-11, line 9, delete the "~~annually~~"

Cmt. No.	Pg. & Line	Sec.	Comment/Recommendation	Navy Response April 22, 2013
			annually while line 30 says all monitoring reduced to every other year. Will semi-monthly free product recovery continue? What about the shoreline inspection/sampling? ADEC concurs with discontinuation of sampling at wells listed on line 7. I don't' think we are in disagreement on any particular change in the program but it needs to be clearly stated.	replace with "**during LTM activities.**" Recommendations made in this report are only for LTM activities. Recommendations for changes to the semi-monthly free product recovery program are now made only in the Annual Remedial Action Summary Report for Free Product Recovery. In the past, recommendations to continue or discontinue monthly FPR at wells have been made in the AGWMR but for clarity have been segregated into the RA Summary report as previously discussed with ADEC. Shoreline inspections will continue since it is a required monitoring activity (lines 23-24).
9.	Page 10-6	10.6	ADEC concurs with recommendations to discontinue sampling at well 08-175 and to reduce monitoring frequency at this site.	The Navy will implement the recommendations.
10.	Page 11-6	11.6	ADEC concurs with recommendations to discontinue sampling at well 14-110 and to reduce monitoring frequency at this site.	The Navy will implement the recommendations.
11.	Page 12-5	12.6	ADEC concurs with discontinuation of ground water monitoring at this site. ADEC will issue a "Cleanup Complete with IC's" determination for this site. Please include site monitoring wells in the list of wells to be decommissioned.	The Navy will implement the recommendations. All LTM wells for which monitoring is agreed to be discontinued will be included on the 2013 LTM Wells Repairs List as requiring decommissioning. These wells will be scheduled to be decommissioned during a

Cmt. No.	Pg. & Line	Sec.	Comment/Recommendation	Navy Response April 22, 2013
				future event.
12.	Page 13-5	13.6	ADEC concurs with recommendations to reduce monitoring frequency at this site.	The Navy will implement the recommendations.
13.	Page 14-7	14.6	ADEC concurs with recommendations to discontinue sampling at well 04-801, discontinue monitoring at well SP4-2, and to reduce monitoring frequency at this site.	The Navy will implement the recommendations.
14.	Page 14-9	Figure 14-2	Well SP4-3 was sampled and should have a box around it.	Change made.
15.	Page 15-9	15.6	Please specify that the recommendation to reduce frequency includes surface water and sediment sampling. ADEC concurs with reducing monitoring frequency at this site. Also eliminating monitoring at the wells listed on line 21 and 22 eliminates all monitoring points on the northern end of the site. Do we need to include one of these to assist in determining ground water gradient?	Page 15-9, line 17, changed the following: "…recommended that **all** monitoring at the site, **including groundwater, surface water and sediment,** be reduced to every odd year…" The groundwater gradient has been solidly established at this site based on the historical groundwater elevations collected during LTM and FPR activities. Also, based on the quickly decreasing observances of contamination at this site, it is anticipated that this site will meet endpoint criteria in the near future and the gradient on the north end will not be a consideration.
16.	Page 16-5	16.6	ADEC concurs with recommendations to reduce monitoring frequency at this site. *Though it does seem that we already aligned many of these.*	The Navy will implement the recommendations.
17.	Page 17-6	17.6	ADEC concurs with recommendations to discontinue DRO monitoring at this site and to reduce monitoring	The Navy will implement the

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			frequency at well 05-375.	recommendations.
18.	Page 18-5	18.6	"DRO concentrations have remained **at or** below endpoint criteria for at least two consecutive sampling events;" Please add the bolded text.	Change made for well 12-203.
19.	Page 18-5	18.6	ADEC concurs with discontinuation of ground water monitoring at this site. ADEC will issue a "Cleanup Complete with IC's" determination for this site. Please include site monitoring wells in the list of wells to be decommissioned. Stream inspection should be included in IC monitoring requirements, if not already included.	The Navy will implement the recommendations. After discussions with the Navy on April 17, 2013, ADEC agreed that continuing stream shoreline inspections at this site is not required. All LTM wells for which monitoring is agreed to be discontinued will be included on the 2013 LTM Wells Repairs List as requiring decommissioning. These wells will be scheduled to be decommissioned during a future event.
20.	Page 19-10	19.6	This site has a potential Surface Water Quality Issue. Free product in the new wells appears to have reduced and the monthly data does not show consistent free product. But increase in sediment concentration is concerning. Recommend postponing the decision on reducing monitoring frequency at this site pending 2013 data? ADEC concurs with reducing monitoring frequency for MW-E006. I don't' necessarily disagree with changing the frequency but one more year of data may increase confidence.	Page 19-10, lines 10 and 11, made the following changes: "…it is recommended that all **other** monitoring at this site **continue as prescribed. If 2013 monitoring results continue to show only incremental changes to previous years' results, it is recommended that monitoring at the site** be reduced to every odd year ~~with the next monitoring to occur in 2013~~. Also please see RTC #1.
21.	Page 20-	20.6	ADEC concurs with recommendations to reduce	The Navy will implement the

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	10		monitoring frequency at this site.	recommendations.
22.	Page 21-16	21.6	ADEC concurs with recommendations to reduce analytes at wells 03-104, 03-778, and 187-1. Page 21-17 Line 1: Well 03-885??? Well not in tables. If this is supposed to be 03-895 then ADEC concurs with removal from sampling network. Page 21-17 Line 6: Well HWM-102-1???? Well not in tables. Closest I can come up with is MW-107-1 which still has DRO contamination so I am not sure which well you are trying to discontinue here. Please review. Assuming that semi-monthly free product recovery continues as planned then in general ADEC concurs with recommendations for the site. We need to resolve well discrepancies above. ADEC concurs with recommended changes to the monitoring program for Eagle Bay Housing area.	Well 03-855 is supposed to be 03-895. Text was corrected. HMW-102-1 is located east of the northwest plume area right next to well RW-102-4. It is listed in Table 21-1, 7th well under Sandy Cove. It was not sampled but only monitored for groundwater elevation and PT. Recommendations in this report do not apply to the semi-monthly free product recovery activities.
23.	Page 22-6	22.6	It would be helpful if those wells that would remain in the "free product monitoring/groundwater flow determination" network were identified on Figure 22-1 so that we can easily see what wells will continue to have data collected. I agree with reducing the number of wells but want to ensure we have enough to determine ground water flow direction. ADEC concurs with recommendations to reduce monitoring frequency at this site.	Wells at which semi-monthly free product recovery activities will be identified on Figures 22-1 for Sandy Cove and 22-2 for Eagle Bay.

Technical Review and Comments
Draft 2012 Annual Groundwater Monitoring Report
Long-Term Monitoring, Operable Unit A
Former Adak Naval Installation, Adak, Alaska
Document Date: February 21, 2013
Commenter: EPA

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GENERAL COMMENT			
1	Draft 2012 Annual GWMR	**Comment:** The site-specific figures included in the Draft 2012 Annual Groundwater Monitoring Report Long-Term Monitoring (the 2012 GWMR) display the estimated extent of endpoint criteria exceedances; however, in many cases the extent of these exceedances is not fully supported by groundwater concentration data. For example, Figure 16-2 shows the extent of estimated endpoint exceedances at Solid Waste Management Unit (SWMU) 14, but there are no sample locations west, east, or south of MW14-5, so it is not clear what data were used to support the estimated extent of endpoint criteria exceedances. Please revise the 2012 GWMR to provide sufficient data to support the extent of endpoint criteria exceedances displayed in the site-specific figures. At a minimum the text should discuss the off-figure data points which the Navy is using to make the estimations. The figure should depict groundwater elevations, with flow also.	After discussion with EPA on April 17, 2013, it was agreed that areas of endpoint exceedance would be removed from site figures with insufficient wells to define the areas. In addition, it was agreed that potentiometric surface figures would be deleted from the report since groundwater flow direction has remained constant at all the sites since 2005. The determined groundwater direction flow will be placed on each site figure containing analytical results. Groundwater elevations will continue to be calculated from depths to groundwater measurements collected in the field. Each year, elevations will be compared to historic elevations for each site to verify that the groundwater flow direct has not changed. Extent of contamination was determined during site characterization which occurred at the sites prior to the ROD (1999) or based on individual site Final Decision Documents. This information is summarized in the Site Catalog in the CMP, Rev 5. The wells selected for LTM included both plume source and sentinel wells based on the observed contamination during characterization. Most other monitoring wells used for site characterization and determining contaminant extent have since been decommissioned for which SWMU 14 is an excellent example. Monitoring wells previously installed east and west of the site are no longer in use because cleanup levels were not exceeded; therefore, only two wells 01-153 and MW14-5 were selected for LTM. As demonstrated in Table 2-4 Monitoring History, petroleum contamination had exceeded endpoints in well 01-153 from 2003 to 2007 (located south of well MW14-5) but monitoring was discontinued in 2008 when endpoints were met. This is

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			also the case for the other LTM sites. The purpose of the LTM is to monitor concentrations of contaminants in existing wells to show the selected remedy of MNA is occurring and to make changes to the monitoring program in the form of discontinuing or reducing monitoring in wells as endpoints are met. The purpose of illustrating the estimated extent of endpoint exceedances on the report figures is to demonstrate visibly which monitoring wells still require continued monitoring based on annual LTM results for the convenience of the reader. In the interest of not expanding the size of this already large report, the Navy does not believe that it is necessary to define the extent of exceedance to that level by adding a discussion of historic site characterization information to the text. For most sites, groundwater elevations and groundwater flow directions are presented on the first figure (x-1) and sampling results and estimated extent of endpoint exceedances are presented on the second figure (x-2) in that section. Some sites did not have a sufficient number of wells to infer a potentiometric surface and only had one figure for their section. For those sites, an estimated groundwater flow direction was made based on both historical information and topographic surface which is included on the site figure with sampling results.
SPECIFIC COMMENTS			
1	Draft 2012 Annual GWMR Table 2-1 and Page 2-5 Lines 1 through 7	**Comment:** According to page 2-5, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites not associated with landfills include SWMU 14, SWMU 15, SWMU 17, and SWMU 55; however, Table 2-1 lists 13 CERCLA sites, but only two are landfills, which are addressed under a separate monitoring program. Please indicate in the text or on Table 2-1 that Palisades, Metals, and Roberts landfills were addressed via other decision documents than the OU A ROD.	After discussion with EPA on April 17, 2013, it was agreed that the first part of Section 2 in the text through Table 2-3 will be deleted from the report. This is of historical value only and is presented in other documents like the CMP, ROD, and Decision Documents. Section 2 will be revised to focus more on historical and current LTM activities only.
2	Draft 2012 Annual GWMR Table 2-1 and	**Comment:** Table 2-3 does not include all 13 of the CERCLA sites that are listed in Table 2-1 (e.g., SWMU 10). It is understood that some of the 13 CERCLA sites may have been conditionally closed; however, these sites should be included in	Please see RTC to Specific comment 1.

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	Table 2-3	the table and the date of conditional closure listed. Please revise Table 2-3 to include all the CERCLA sites that have been listed in Table 2-1 or explain why sites have been excluded.	
3	Draft 2012 Annual GWMR Page 2-5 Lines 30 through 32 and Table 2-2	**Comment:** According to Page 2-5, "the decision document for SWMU 17 signed in December 2006 designated a selected remedy of monitored natural attenuation (MNA) and ICs [institutional controls];" however, Table 2-2 includes free product recovery and CERCLA compliance monitoring. Please resolve this discrepancy.	Please see RTC to Specific comment 1.
4	Draft 2012 Annual GWMR Table 2-2 and Table 2-3	**Comment:** Table 2-2 shows that SWMU 10, SWMU 15, SWMU 16, SWMU 20, SWMU 21, SWMU 23, SWMU 24, SWMU 52/53/59, and SWMU 67 have all been conditionally closed (as noted by an asterisk); however, Table 2-3 does not state that SWMU 16 has been conditionally closed. Please revise Table 2-3 to include SWMU 10, SWMU 20, SWMU 21, SWMU 23, SWMU 24, SWMU 52/53/59, and SWMU 67 and include the year these sites received conditional closure. In addition, please revise Table 2-3 to state that SWMU 16 has been conditionally closed and to include the year this site received conditional closure or revise Table 2-2 to indicate that this site was not conditionally closed.	Please see RTC to Specific comment 1.
6	Draft 2012 Annual GWMR Table 2-3	**Comment:** Table 2-3 states that "in 2012, ADEC [Alaska Department of Environmental Conservation] agreed to grant conditional closure for this site [SWMU 15] in 2004, and long-term monitoring was discontinued;" however, it is not clear whether the closure was issued in 2012 or 2004 and whether long-term monitoring was discontinued in 2012 or 2004. Please revise the text to clarify the year that ADEC granted conditional closure for SWMU 15 and to clarify during which year long-term monitoring was discontinued.	Please see RTC to Specific comment 1.
7	Draft 2012 Annual GWMR Table 2-4	**Comment:** Table 2-4 shows that well 55-145 at SWMU 55 was not sampled during 2012, but there is no information to explain why this well was not sampled. Please either revise the text or Table 2-4 to explain why well 55-145 was not sampled for SWMU 55.	As per the CMP, monitoring was reduced at this site last year to every odd year.
8	Draft 2012 Annual GWMR Page 3-5 Lines 5 through 8	**Comment:** In addition to long-term trends, short-term trends (e.g., the most recent four or five data points) should be evaluated to provide a more complete assessment of the data. It is important to acknowledge both short-term and long-term data trends. Please revise the 2012 GWMR to include an evaluation of both long-term and short-term trends.	Short-term trend analysis is not required according to the regulator approved CMP, Revision 5. The historic data collected since the inception of the LTM program on Adak shows that there are slight increases and decreases in data from year to year. These 'trends' are not ignored but they have been attributed to tidal cycles, climatic changes from year to year, seasonal precipitation variations and other conditions. In 2013, no variations in short term data such

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			as steadily increasing or spiked concentrations over the last five years were observed that would indicate that there was an increase in risk for potential exposure to downgradient receptors. If a sudden increase in concentrations were noted possibly signifying contaminant migration, however, the Navy would notify the EPA and ADEC so that appropriate mitigation measures could be taken, if warranted.
9	Draft 2012 Annual GWMR Page 3-5 Lines 29 through 31	**Comment:** Page 3-5 states that "trend evaluations were not performed in 2012 for wells that are scheduled to be sampled every odd year and were not sampled in 2012…trends for these wells were conducted in 2011 and are included in the Final 2011 Annual Groundwater Monitoring Report;" however, the text does not specify whether trend evaluations will be performed for these wells in the 2013 Annual GWMR. Please revise page 3-5 to specify whether trend evaluations will be performed for these wells in the 2013 Annual GWMR.	Page 3-5, line 32, added the following: "**Trend evaluations will be performed for wells sampled biennially and reported in the subsequent Annual Groundwater Monitoring Report as prescribed by the CMP, Revision 5 (Navy 2012e).**"
10	Draft 2012 Annual GWMR Page 3-8 Lines 10 and 11	**Comment:** The text on page 3-8 does not explain how trend analyses were completed for chlorinated volatile organic compounds (VOCs) and daughter products. For example, it is not clear whether concentrations were converted to millimoles to help understand whether degradation or dilution is occurring. Please revise the text to explain how trend analyses were completed for chlorinated VOCs and daughter products.	Trends for VOCs were performed the same way as for petroleum contaminants as stated on page 3-8 lines 24 and 25. This is per the CMP, Rev 5.
11	Draft 2012 Annual GWMR Page 3-8 Lines 16 through 29	**Comment:** It is unclear whether the procedures address vapor intrusion when plumes are present beneath or in the vicinity of buildings (i.e., preferential pathways along utilities could facilitate vapor movement toward and into buildings). For example, Table 17-2 and Figure 10-2 indicate the VOC groundwater plume is adjacent to Buildings 10203 and 10284 (the Power Plant No. 3). Cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride were detected at 240 micrograms per liter (ug/L) and 2.7 ug/L respectively at well 05-735, which is east of Building 10203 and south of Building 10284. These concentrations are above the endpoint criteria for cis-1,2-DCE (70 ug/L) and vinyl chloride (2 ug/L), so vapor intrusion could occur at these concentrations. In addition, the endpoint criteria for these compounds should be re-evaluated using current vapor intrusion methodology to determine if they are still protective. Please list the sites where groundwater plumes extend near or beneath buildings and discuss in detail the assessment of vapor intrusion at these locations. Please also re-evaluate the endpoint criteria using current vapor intrusion methodology to determine if	The Navy has determined that there are no occupied buildings located on or down gradient of any VOC plumes; therefore, vapor intrusion is not a concern at these sites.

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		they are still protective.	
12	Draft 2012 Annual GWMR Section 6 Pages 6-1 through 6-7	**Comment:** Section 6 is qualitative, not quantitative. Each section should include the quantitative results or a quantitative summary. For example, the accuracy discussion indicates that "a small percentage of the 2012 analytical results were qualified as 'estimated;' however, the actual percentage is not provided. Another example can be found in the discussion for completeness, which states "completeness for some parameters for some sites was less than the project-specific QC [quality control] goal of 95 percent;" however, the text does not specify which sites did not meet the goal of 95 percent. Please revise Section 6 to include a quantitative discussion of the data.	Appendix G is referenced throughout Section 6 and presents the quantitative analysis of the QC requirements by site and by sample. Specifically, completeness listed as percent by site is presented in Table G-3 of the appendix.